# Community Health Needs Assessment

## Jamestown Regional Medical Center (Stutsman County) Service Area

Jamestown, North Dakota

2021

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# Executive Summary

To help inform future decisions and strategic planning, Jamestown Regional Medical Center (JRMC) conducted a Community Health Needs Assessment (CHNA) in 2021, the previous CHNA having been conducted in 2018. The Center for Rural Health (CRH) at the University of North Dakota School of Medicine & Health Sciences (UNDSMHS) facilitated the assessment process, which solicited input from area community members and healthcare professionals, as well as analysis of community health-related data.

To gather feedback from the community, residents of the area were given the opportunity to participate in a survey. Three hundred sixty-nine JRMC service area residents completed the survey. Additional information was collected through 12 key informant interviews with community members. The input from the residents, who primarily reside in Stutsman County, represented the broad interests of the communities in the service area. Together with secondary data gathered from a wide range of sources, the survey presents a snapshot of the health needs and concerns in the community.

With regard to demographics, Stutsman County's population from 2010 to 2019 decreased by 1.9%. The average number of residents younger than age 18 (20.0%) for Stutsman County comes in 3.6 percentage points lower than the North Dakota average (23.6%). The percentage of residents ages 65 and older is just over 4% higher for Stutsman County (19.9%) than the North Dakota average (15.7%), and the percentage of high school graduates is slightly lower for Stutsman County (91.1%) than the North Dakota average (92.6%). The median household income in Stutsman County ($57,674) is well below the state average for North Dakota ($64,894).

Data compiled by County Health Rankings show Stutsman County is performing equal to or better than North Dakota in health outcomes / factors for 23 categories, while the county is performing poorer than North Dakota in eight categories.

Of 106 potential community and health needs set forth in the survey, the 369 JRMC service area residents who completed the survey indicated the following 10 needs as the most important:

- Attracting and retaining young families
- Drug use and abuse (including prescription drug abuse)
- Cost of long-term / nursing home care
- Not enough jobs with livable wages, not enough to live on
- Youth depression / anxiety
- Adult drug use and abuse (including prescription drug abuse)
- Adult depression / anxiety
- Adult alcohol use and abuse
- Availability of resources to help the elderly stay in their homes
- Youth alcohol use and abuse

The survey also revealed the biggest barriers to receiving healthcare (as perceived by community members). They included not enough specialists (N=99), not affordable (N=83), not enough evening or weekend hours (N=83), and not able to get appointment / limited hours (N=77).

When asked what the best aspects of the community were, respondents indicated the top community assets were:

- People are friendly, helpful, supportive
- Family-friendly; good place to raise kids
- Closeness to work and activities
- Year-round access to fitness opportunities
- Healthcare
- Recreational and sports activities


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Input from community leaders, provided via key informant interviews, echoed many of the concerns raised by survey respondents. Concerns emerging from these sessions were:

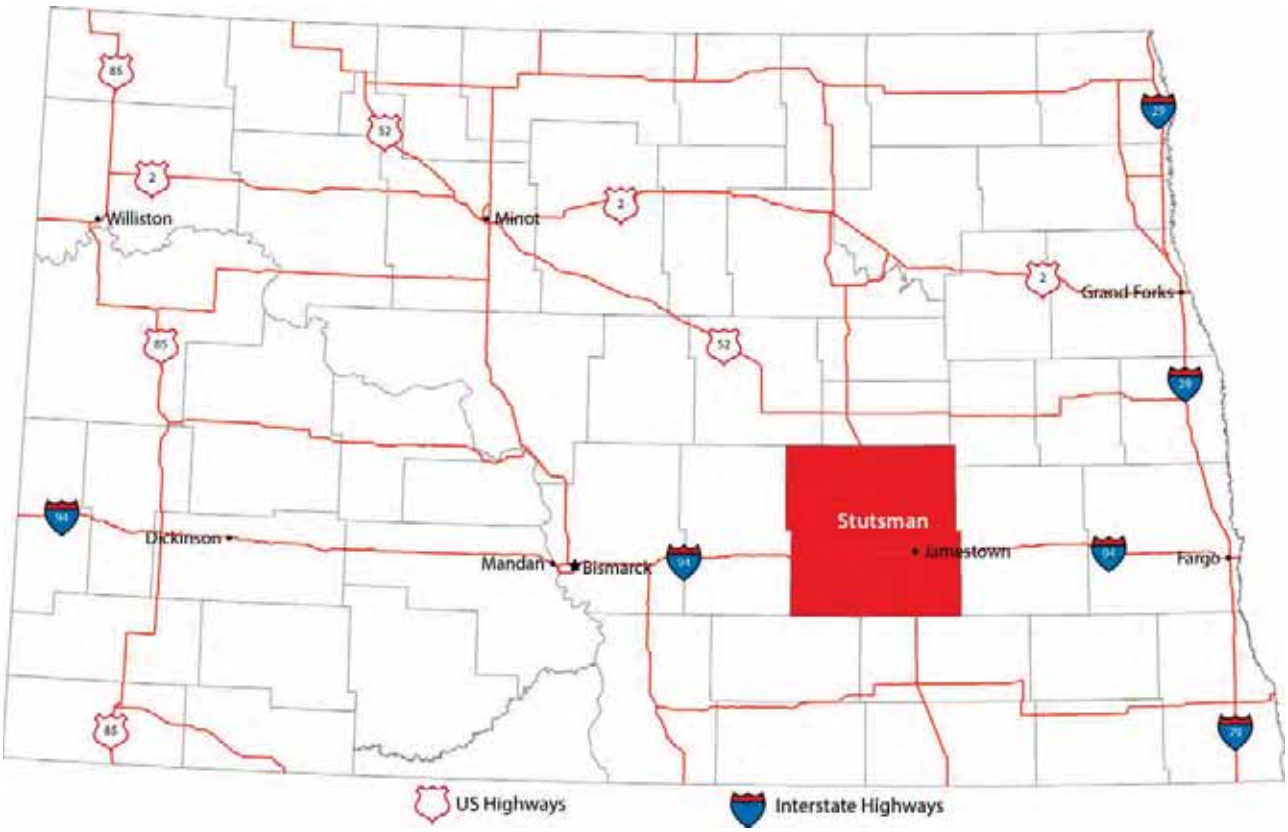
- Attracting and retaining young families
- Availability of resources to help the elderly stay in their homes
- Alcohol use and abuse – Adults
- Cost of long-term / nursing home care
- Depression / anxiety

# Overview and Community Resources

With assistance from the CRH at the UNDSMHS, JRMC completed a CHNA of the JRMC service area. The hospital identifies its service area as nine counties in a 60-mile radius of Jamestown. Those counties include Stutsman (primary), Barnes, Foster, Eddy, LaMoure, Kidder, Dickey, Griggs, and Wells. Many community members and stakeholders worked together on the assessment.

Stutsman County is located in the center of southeast North Dakota. The county was organized in 1873 and the county seat is Jamestown. It covers a total area of 2,298 square miles and is mostly rural, according to the American Community Survey from the U.S. Census Bureau. The ethnic composition of the population of Stutsman County includes White residents (91.15%), Hispanic residents (3.06%), and Black residents (3.51%). The most common foreign languages in the county are Spanish, German, and Tagalog (63 speakers), but compared to other places, Stutsman County has a relatively large number of German speakers. The sole university in Stutsman County is the University of Jamestown, which averages approximately 1,000 students per year. Stutsman County is the eighth most populated county in North Dakota.

### Figure 1: Stutsman County





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# Jamestown Regional Medical Center

Since 1929, JRMC has focused on making human connections and memorable impressions. The mission reminds JRMC employees to "Exceed expectations and be THE difference in the lives of those we serve." Even though the hospital has almost 90 years of experience, there is nothing outdated about how they deliver care. In fact, JRMC's history of doing things first and with excellence has earned the facility a legendary reputation. The hospital does not offer primary care, though it does offer specialty services, including ear, nose, and throat, gynecology, orthopedics, podiatry, urology, and wound care. All of these services are offered under one roof at JRMC. JRMC also offers outreach specialty care in Valley City and Carrington.


JRMC has a significant economic impact on the region. It directly employs 282 full time equivalent (FTE) employees with an annual payroll of more than $24.8 million (including benefits). These employees create an additional 182 jobs and nearly $9.23 million in income as they interact with other sectors of the local economy. This results in a total impact of 464 jobs and more than $34 million in income. Additional information is provided in Appendix B.

The Critical Access Hospital Profile for JRMC that includes a summary of hospital-specific information is available in Appendix A.

Services offered locally by JRMC include:

### General and Acute Services

- Cancer care
- Cardiac rehab
- Clinic
- Ear, nose, and throat (ENT)
- Emergency room
- Gynecology
- Hospital (acute care)
- Nutrition counseling
- Ophthalmology evaluation and surgery services
- Orthopedics
- Pharmacy
- Physicals: sports medicine
- Podiatry – evaluation and surgery
- Pulmonary rehab
- Surgical services – biopsies
- Surgical services—outpatient
- Swing bed services
- Urology
- Wound Care

### Screening/Therapy Services

- Audiology
- Home care
- Hospice
- Laboratory services
- Lower extremity circulatory assessment
- Occupational therapy
- Pediatric services
- Physical therapy
- Respiratory care
- Social services
- Speech therapy


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### Radiology Services

- CT scan
- 3D mammography
- Echocardiograms
- EKG
- General x-ray
- MRI
- Nuclear medicine
- Ultrasound

### Laboratory Services

- Blood types
- Clot times
- Chemistry
- Pregnancy Testing
- Direct access testing
- Hematology
- Urine testing

### Services Offered by Other Providers/Organizations

- Ambulance
- Chiropractic services
- Dental services
- Massage therapy
- Optometric / vision services

## Central Valley Health District

Central Valley Health District (CVHD) was established in 1973. The main office is located at 122 2nd St. NW in downtown Jamestown and serves residents of Stutsman and Logan counties. The Board of Health governs the agency. Funding for agency services come from local, state, and federal funds, including grants, private insurance, and a sliding fee.

All eligible people have equal access to the programs, facilities, and employment of this agency without regard to race, creed, economic status, color, sex, national origin, or physical or mental handicap.

VISION
To be the healthiest community to live, learn, work, and play.

MISSION
Prevent, promote, protect for optimal community health.

CORE VALUES
Collaboration – Working with other facilities and services in the community to promote optimal community health.
Respect – Embrace the dignity and diversity of individuals, groups, and communities.
Science – Support and promote evidence-based practices.
Teamwork – Working together to share purpose and common goal.
Excellence – Achieve the highest quality in what we do.
Innovation – Integrating new ideas and technology into practical processes to improve our effectiveness.
Prevention – Using knowledge to prevent disease and injury and make smart decisions to stay healthy.

STRATEGIC PRIORITIES
Increase awareness of values of public health in our community.
Develop and implement strategies to obtain sustainable, adequate public health.
Ensure optimal competent workforce to fulfill our mission.
Focus public health practice to address the determinants of health.


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Practice collaborative / integrative leadership.
Commit to continuous quality improvement.
Enhance our ability to respond to emerging health issues.

Specific services that CVHD provides are:

- Car seat safety
- Emergency preparedness
- Environmental health
- Family planning
- Injury prevention
- Nursing service
- Substance use prevention
- Tobacco Prevention
- Vaccines and immunizations
- WIC (Women, Infants, and Children)
- Women's Way

# Assessment Process

The purpose of conducting a CHNA is to describe the health of local people, identify areas for health improvement, identify use of local healthcare services, determine factors that contribute to health issues, identify and prioritize community needs, and help healthcare leaders identify potential action to address the community's health needs.

A CHNA benefits the community by:

1) Collecting timely input from the local community members, providers, and staff;

2) Providing an analysis of secondary data related to health-related behaviors, conditions, risks, and outcomes;

3) Compiling and organizing information to guide decision making, education, and marketing efforts, and to facilitate the development of a strategic plan;

4) Engaging community members about the future of healthcare; and

5) Allowing the community hospital to meet the federal regulatory requirements of the Affordable Care Act, which requires not-for-profit hospitals to complete a CHNA at least every three years, as well as helping the local public health unit meet accreditation requirements.

This assessment examines health needs and concerns in Stutsman County. Located in this county are the towns of Buchanan, Cleveland, Courtenay, Jamestown, Kensal, Medina, Pingree, Spiritwood, Spiritwood Lake, Streeter, Woodworth, and Ypsilanti.

CRH, in partnership with JRMC and CVHD, facilitated the CHNA process. Community representatives met regularly in-person, by telephone conference, and email. A CHNA liaison was selected locally and served as the main point of contact between CRH and JRMC. A steering committee (see Figure 2) was formed that was responsible for planning and implementing the process locally. Representatives from CRH met and corresponded regularly by teleconference and / or via the eToolkit with the CHNA liaison. The key informant interviews (described in more detail as follows) provided in-depth information and informed the assessment process in terms of community perceptions, community resources, community needs, and ideas for improving the health of the population and healthcare services. Twelve people, representing a cross section demographically, were interviewed, and the interviews were highly interactive with good participation.


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### Figure 2: Steering Committee

| | |
|---|---|
| Amy Walters | Director, Two Rivers Activity Center (TRAC) |
| Robin Iszler | Administrator, Central Velley Health District |
| Tami Dillman | Finance Director, Central Valley Health District |
| Trisha Jungels | Chief Nursing Officer, Jamestown Regional Medical Center |
| Katherine Ryan-Anderson | Marketing Manager, Jamestown Regional Medical Center |
| Shannon Klatt | Director of Health Promotion, Central Valley Health District |

The original survey tool was developed and used by CRH. In order to revise the original survey tool to ensure the data gathered met the needs of hospitals and public health, CRH worked with the North Dakota Department of Health's public health liaison. CRH representatives also participated in a series of meetings that garnered input from the state's health officer, local North Dakota public health unit professionals, and representatives from North Dakota State University.

As part of the assessment's overall collaborative process, CRH spearheaded efforts to collect data for the assessment in a variety of ways:

- A survey solicited feedback from area residents;
- Community members representing the broad interests of the community took part in one-on-one key informant interviews; and
- A wide range of secondary sources of data were examined, providing information on a multitude of measures, including demographics, health conditions, indicators, outcomes, rates of preventive measures, rates of disease, and at-risk behavior.

CRH is one of the nation's most experienced organizations committed to providing leadership in rural health. Its mission is to connect resources and knowledge to strengthen the health of people in rural communities. CRH is the designated State Office of Rural Health and administers the Medicare Rural Hospital Flexibility (Flex) program, funded by the Federal Office of Rural Health Policy, Health Resources Services Administration, and Department of Health and Human Services. CRH connects the UNDSMHS and other necessary resources to rural communities and other healthcare organizations in order to maintain access to quality care for rural residents. In this capacity, CRH works at a national, state, and community level.

Detailed, as follows, are the methods undertaken to gather data for this assessment, including convening a community group, conducting key informant interviews, soliciting feedback about health needs via a survey, and researching secondary data.

## Interviews

One-on-one interviews with 12 key informants were conducted via phone and videoconference in February and March 2021. A representative from CRH conducted the interviews. Interviews were held with selected members of the community who could provide insights into the community's health needs. Included among the informants were public health professionals with special knowledge in public health acquired through several years of direct experience in the community, including working with medically underserved, low-income, and minority populations, as well as with populations with chronic diseases.

Topics covered during the interviews included the general health needs of the community, the general health of the community, community concerns, delivery of healthcare by local providers, awareness of health services offered locally, barriers to receiving health services, and suggestions for improving collaboration within the community.


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## Survey

A survey was distributed to solicit feedback from the community and was not intended to be a scientific or statistically valid sampling of the population. It was designed to be an additional tool for collecting qualitative data from the community at large – specifically, information related to community-perceived health needs. A copy of the survey instrument is included in Appendix C, and a full listing of direct responses provided for the questions that included "Other" as an option are included in Appendix G.

The community member survey was distributed to various residents of the JRMC service area. The survey tool was designed to:

- Learn of the good things in the community and the community's concerns;
- Understand perceptions and attitudes about the health of the community and hear suggestions for improvement; and
- Learn more about how local health services are used by residents.

Specifically, the survey covered the following topics:

- Residents' perceptions about community assets;
- Broad areas of community and health concerns;
- Awareness of local health services;
- Barriers to using local healthcare;
- Basic demographic information; and
- Suggestions to improve the delivery of local healthcare.

To promote awareness of the assessment process, the survey was advertised via JRMC's social media and website. Direct emails were also sent out twice. Print ads were put in the local paper as well as releasing radio advertisements.

Approximately 250 community member surveys were available for distribution in the JRMC service area and were available at JRMC along with area businesses, including banks, a car dealership, the Wal-Mart break room, and other locations.

To help ensure anonymity, included with each survey was a postage-paid return envelope to CRH. In addition, to help make the survey as widely available as possible, residents also could request a survey by calling JRMC. The survey period ran from March 1, 2021, to March 10, 2021. Two completed paper surveys were returned.

Area residents were also given the option of completing an online version of the survey, which was publicized in the newspaper, emailed, and included on the JRMC Facebook page and website. Three hundred ninety-two online surveys were completed. In total, counting both paper and online surveys, 369 community member surveys were completed, equating to a response rate of a little more than 3%. This response rate is low for this type of unsolicited survey methodology and indicates a less-than-engaged community. However, this is on-trend for response rates during the COVID-19 pandemic.

## Secondary Data

Secondary data was collected and analyzed to provide descriptions of: (1) population demographics, (2) general health issues (including any population groups with particular health issues), and (3) contributing causes of community health issues. Data was collected from a variety of sources, including the U.S. Census Bureau; the Robert Wood Johnson Foundation's County Health Rankings, which pulls data from 20 primary data sources (www.countyhealthrankings.org); the National Survey of Children's Health, which touches on multiple intersecting aspects of children's lives (www.childhealthdata.org/learn/NSCH); North Dakota KIDS


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COUNT, which is a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation (www.ndkidscount.org); and Youth Risk Behavior Surveillance System (YRBSS) data, which is published by the Centers for Disease Control and Prevention (CDC, https://www.cdc.gov/healthyyouth/data/yrbs/index.htm).

## Social Determinants of Health

Social determinants of health are, according to the World Health Organization, "*The circumstances in which people are born, grow up, live, work, and age and the systems put in place to deal with illness. These circumstances are in turn shaped by wider set of forces: economics, social policies, and politics.*"

Income level, educational attainment, race/ethnicity, and health literacy all impact the ability of people to access health services. Basic needs such as clean air and water and safe and affordable housing are all essential to staying healthy and are also impacted by the social factors listed previously. The barriers already present in rural areas, such as limited public transportation options and fewer choices to acquire healthy food, can compound the impact of these challenges.

There are numerous models that depict the social determinants of health. While the models may vary slightly in the exact percentages that they attribute to various areas, the discrepancies are often because some models have combined factors when other models have kept them as separate factors.

For Figure 3, data has been derived from the County Health Rankings model (https://www.countyhealthrankings.org/resources/county-health-rankings-model), and it illustrates that healthcare, while vitally important, plays only one small role (approximately 20%) in the overall health of individuals and ultimately of a community. Physical environment, social and economic factors, and health behaviors play a much larger part (80%) in impacting health outcomes. Therefore, as needs or concerns were raised through this Community Health Needs Assessment process, it was imperative to keep in mind how they impact the health of the community and what solutions can be implemented.

**Figure 3: Social Determinants of Health**

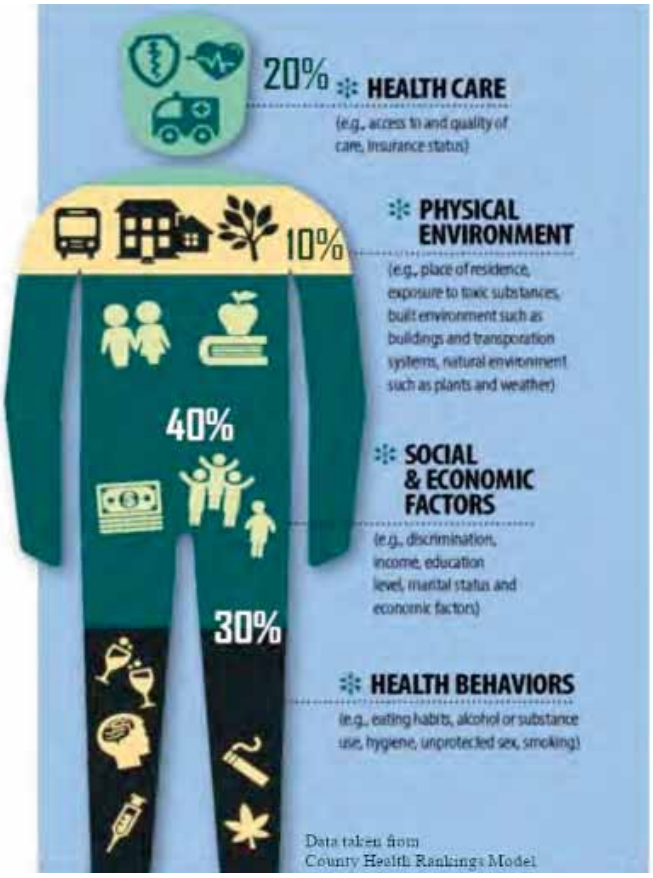



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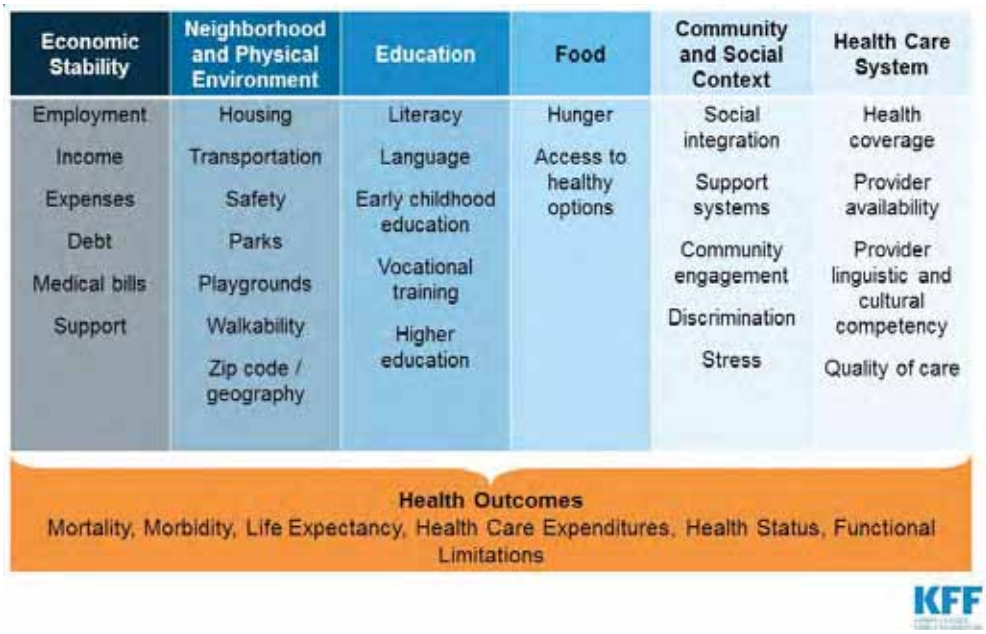
Figure 4 (Henry J. Kaiser Family Foundation, https://www.kff.org/disparities-policy/issue-brief/beyond-health-care-the-role-of-social-determinants-in-promoting-health-and-health-equity/), provides examples of factors that are included in each of the social determinants of health categories that lead to health outcomes.

For more information and resources on social determinants of health, visit the Rural Health Information Hub website, https://www.ruralhealthinfo.org/topics/social-determinants-of-health.

**Figure 4: Social Determinants of Health**




# Demographic Information

**Table 1. Census Data**

| | Stutsman County | North Dakota |
|---|---|---|
| Population (2019) | 20,704 | 762,062 |
| Population change (2010-2019) | -1.9% | 13.3% |
| People per square mile (2010) | 9.5 | 9.7 |
| Persons 65 years or older (2019) | 19.9% | 15.7% |
| Persons under 18 years (2019) | 20.0% | 23.6% |
| Median age (2018 est.) | 46.1 | 35.5 |
| White persons (2019) | 93.7% | 86.9% |
| High school graduates (2018) | 91.1% | 92.5% |
| Bachelor's degree or higher (2018) | 23.5% | 29.5% |
| Live below poverty line (2019) | 11.4% | 10.6% |
| Persons without health insurance, under age 65 years (2019) | 7.7% | 8.1% |

Source: https://www.census.gov/quickfacts/fact/table/ND,US/INC910216#viewtop and https://data.census.gov/cedsci/profile?g=0400000US38&q=North%20Dakota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While the population of North Dakota has grown in recent years, Stutsman County has seen a slight decrease in population since 2010. The U.S. Census Bureau estimates show that county's population decreased from 21,100 (2010) to 20,704 (2019).

## County Health Rankings

The Robert Wood Johnson Foundation, in collaboration with the University of Wisconsin Population Health Institute, has developed County Health Rankings to illustrate community health needs and provide guidance for actions toward improved health. In this report, Stutsman County is compared to North Dakota rates and national benchmarks on various topics ranging from individual health behaviors to the quality of healthcare.

The data used in the 2020 County Health Rankings are pulled from more than 20 data sources and then are compiled to create county rankings. Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, such as 1 or 2, are considered to be the "healthiest." Counties are ranked on both health outcomes and health factors. Following is a breakdown of the variables that influence a county's rank.

A model of the 2020 County Health Rankings – a flow chart of how a county's rank is determined – may be found in Appendix C. For further information, visit the County Health Rankings website at www.countyhealthrankings.org.

**Health Outcomes**

- Length of life
- Quality of life

**Health Factors**

- Health behavior
  - Smoking
  - Diet and exercise
  - Alcohol and drug use
  - Sexual activity

**Health Factors (continued)**

- Clinical care
  - Access to care
  - Quality of care
- Social and Economic Factors
  - Education
  - Employment
  - Income
  - Family and social support
  - Community safety
- Physical Environment
  - Air and water quality
  - Housing and transit

Table 2 summarizes the pertinent information gathered by County Health Rankings as it relates to Stutsman County. It is important to note that these statistics describe the population of a county, regardless of where county residents choose to receive their medical care. In other words, all of the following statistics are based on the health behaviors and conditions of the county's residents, not necessarily the patients and clients of CVHD or JRMC or of any particular medical facility.

For most of the measures included in the rankings, the County Health Rankings' authors have calculated the "Top U.S. Performers" for 2019. The Top Performer number marks the point at which only 10% of counties in the nation do better, i.e., the 90th percentile or 10th percentile, depending on whether the measure is framed positively (such as high school graduation) or negatively (such as adult smoking).


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Stutsman County rankings within the state are included in the summary following. For example, the county ranks 22nd out of 48 ranked counties in North Dakota on health outcomes and 6th on health factors. The measures marked with a red bullet point (•) are those where a county is not measuring up to the state rate / percentage; a blue square (■) indicates that the county is not meeting the U.S. Top 10% rate on that measure. Measures that are not marked with a colored checkmark but are marked with a plus sign (+) indicate that the county is doing better than the U.S. Top 10%.

Data compiled by County Health Rankings show the county is doing equal to or better than North Dakota average in health outcomes and factors for the following indicators:

- Percentage of adults reporting poor or fair health
- Poor physical health days (in past 30 days)
- Poor mental health days (in past 30 days)
- Adult smoking
- Adult obesity
- Physical inactivity
- Access to exercise opportunities
- Excessive drinking
- Alcohol-impaired driving deaths
- Sexually transmitted infections
- Teen birth rate
- Uninsured
- Ratio of population per dentist
- Ratio of population per mental health providers
- Preventable hospital stays
- Mammography screening
- Flu vaccinations
- Unemployment
- Income inequality
- Social associations
- Drinking water violations
- Severe housing problems

Outcomes and factors in which Stutsman County is performing poorly relative to the rest of the state include:

- Low birth rate
- Food environment index
- Ratio of population per primary care physicians
- Children in poverty
- Children in single-parent households
- Violent crime
- Injury deaths
- Air pollution


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## Table 2. Summary of County Health Rankings Data

● = Not meeting North Dakota average

■ = Not meeting U.S. Top 10% Performers

**+** = Meeting or exceeding U.S. Top 10% Performers

*Blank values reflect unreliable or missing data*

| TABLE 2: SELECTED MEASURES FROM *COUNTY HEALTH RANKINGS* 2020 – STUTSMAN COUNTY | | | |
|---|---|---|---|
| | **Stutsman County** | **U.S. Top 10%** | **North Dakota** |
| **Ranking: Outcomes** | **22nd** | | **(of 48)** |
| Premature death | 6,600 ■ | 5,500 | 6,600 |
| Poor or fair health | 13% ■ | 12% | 15% |
| Poor physical health days (in past 30 days) | 2.8 + | 3.1 | 3.3 |
| Poor mental health days (in past 30 days) | 3.2 + | 3.4 | 3.5 |
| Low birth weight | 7% ●■ | 6% | 6% |
| **Ranking: Factors** | **6th** | | **(of 48)** |
| *Health Behaviors* | | | |
| Adult smoking | 17% ■ | 14% | 18% |
| Adult obesity | 32% ■ | 26% | 33% |
| Food environment index (10=best) | 8.7 ●+ | 8.6 | 9.0 |
| Physical inactivity | 23% ■ | 20% | 24% |
| Access to exercise opportunities | 81% ■ | 91% | 74% |
| Excessive drinking | 22% ■ | 13% | 24% |
| Alcohol-impaired driving deaths | 33% ■ | 11% | 43% |
| Sexually transmitted infections | 289.3 ■ | 161.4 | 433.9 |
| Teen birth rate | 17 ■ | 13 | 21 |
| *Clinical Care* | | | |
| Uninsured | 8% ■ | 6% | 9% |
| Primary care physicians | 1,320:1 ●■ | 1,030:1 | 1,300:1 |
| Dentists | 1,490:1 ■ | 1,240:1 | 1,540:1 |
| Mental health providers | 300:1 ■ | 290:1 | 530:1 |
| Preventable hospital stays | 2,283 + | 2,761 | 4,551 |
| Mammography screening (% of Medicare enrollees ages 65-74 receiving screening) | 59% + | 50% | 52% |
| Flu vaccinations (% of fee-for-service Medicare enrollees receiving vaccination) | 57% + | 53% | 49% |
| *Social and Economic Factors* | | | |
| Unemployment | 2.5% + | 2.6% | 2.6% |
| Children in poverty | 12% ●■ | 11% | 11% |
| Income inequality | 4.0 ■ | 3.7 | 4.4 |
| Children in single-parent households | 30% ●■ | 20% | 27% |
| Social associations | 17.5 ■ | 18.4 | 16.2 |
| Violent crime | 285 ●■ | 63 | 258 |
| Injury deaths | 86 ●■ | 58 | 70 |
| *Physical Environment* | | | |
| Air pollution – particulate matter | 5.5 ●+ | 6.1 | 5.4 |
| Drinking water violations | No | | |
| Severe housing problems | 8% + | 9% | 11% |

*Source:* http://www.countyhealthrankings.org/app/north-dakota/2020/rankings/outcomes/overall


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# Children's Health

The National Survey of Children's Health touches on multiple intersecting aspects of children's lives. Data are not available at the county level; listed below is information about children's health in North Dakota. The full survey includes physical and mental health status, access to quality healthcare, and information on the child's family, neighborhood, and social context. Data is from 2017-18. More information about the survey may be found at www.childhealthdata.org/learn/NSCH.

Key measures of the statewide data are summarized below. The rates highlighted in red signify that the state is faring worse on that measure than the national average.

### Table 3: Selected Measures Regarding Children's Health (For children ages 0-17 unless noted otherwise) 2018

| Health Status | North Dakota | National |
|---|---|---|
| Children born premature (3 or more weeks early) | 9.0% | 11.4% |
| Children 10-17 overweight or obese | 31.7% | 30.8% |
| Children 0-5 who were ever breastfed | 82.5% | 80.9% |
| Children 6-17 who missed 11 or more days of school | 3.5% | 4.5% |
| **Healthcare** | | |
| Children currently insured | 91.8% | 93.4% |
| Children who spent less than 10 minutes with the provider at a preventive medical visit | 21.8% | 19.8% |
| Children (1-17 years) who had a preventive dental visit in the past year | 75.0% | 79.1% |
| Children (3-17 years) received mental health care | 12.9% | 9.8% |
| Children (3-17 years) with problems requiring treatment did not receive mental health care | 0.7% | 2.2% |
| Young children (9-35 mos.) receiving standardized screening for developmental problems | 42.2% | 35.2 % |
| **Family Life** | | |
| Children whose families eat meals together four or more times per week | 71.7% | 73.6% |
| Children who live in households where someone smokes | 15.3% | 15.0% |
| **Neighborhood** | | |
| Children who live in neighborhoods with parks, recreation centers, sidewalks, and a library | 35.1% | 38.3% |
| Children living in neighborhoods with poorly kept or rundown housing | 1.3% | 3.8% |

*Source:* https://www.childhealthdata.org/browse/survey


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The data on children's health and conditions reveal that while North Dakota is doing better than the national averages on a few measures, it is not measuring up to the national averages with respect to:

- Children 10-17 overweight or obese
- Children currently insured
- Children who spent less than 10 minutes with the provider at a preventative medical visit
- Children (1-17 years) who had a preventive dental visit in the past year
- Children whose families eat meals together four or more times per week
- Children living in smoking households
- Children living in neighborhoods with parks, recreation centers, sidewalks, and a library

Table 4 includes selected county-level measures regarding children's health in North Dakota. The data come from North Dakota KIDS COUNT, a national and state-by-state effort to track the status of children, sponsored by the Annie E. Casey Foundation. KIDS COUNT data focuses on the main components of children's well-being; more information about KIDS COUNT is available at www.ndkidscount.org. The measures highlighted in blue in the table are those in which the counties are doing worse than the state average. The year of the most recent data is noted.

The data shows Stutsman County is performing better than the North Dakota average on all of the examined measures except the percentage of children ages 0 to 17 in poverty based on the population percentage. The most marked difference from the state average was on the measure of licensed childcare capacity (5.4% higher rate in Stutsman County); this is a positive.

### Table 4: Selected County-Level Measures Regarding children's Health

| | Stutsman County | North Dakota |
|---|---|---|
| Uninsured children (% of population age 0-18), 2018 | 6.1% | 6.3% |
| Children in poverty (% of population age 0-17), 2019 | 11.5% | 10.9% |
| Medicaid recipient (% of population age 0-20), 2019 | 25.1% | 26.6% |
| Children enrolled in Healthy Steps (% of population age 0-18), 2019 | 1.6% | 1.6% |
| Supplemental Nutrition Assistance Program (SNAP) recipients (% of population age 0-18), 2019 | 16.6% | 16.9% |
| Licensed childcare capacity (% of population age 0-13), 2020 | 45.3% | 39.9% |
| 4-Year High School Cohort Graduation Rate, 2018 | 88.8% | 88.3% |

*Source:* https://datacenter.kidscount.org/data#ND/5/0/char/0

Another means for obtaining data on the youth population is through the Youth Risk Behavior Survey (YRBS). The YRBS was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to monitor priority health risk behaviors that contribute markedly to the leading causes of death, disability, and social problems among youth and adults in the U.S. The YRBS was designed to monitor trends and compare state health risk behaviors to national health risk behaviors and was intended for use to plan, evaluate, and improve school and community programs. North Dakota began participating in the YRBS survey in 1995. Students in grades 7-8 and 9-12 are surveyed in the spring of odd years. The survey is voluntary and completely anonymous.

North Dakota has two survey groups, selected and voluntary. The selected school survey population is chosen using a scientific sampling procedure, which ensures that the results can be generalized to the state's entire student population. The schools that are part of the voluntary sample, selected without scientific sampling procedures, will only be able to obtain information on the risk behavior percentages for their school and not in comparison to all the schools.


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Table 5 depicts some of the YRBS data that was collected in 2015, 2017, and 2019. They are further broken down by rural and urban percentages. The trend column shows a "=" for statistically insignificant change (no change), "↑" for an increased trend in the data changes from 2017 to 2019, and "↓" for a decreased trend in the data changes from 2017 to 2019. The final column shows the 2019 national average percentage. For a more complete listing of the YRBS data, see Appendix D.

## Youth Behavioral Risk Survey Results

North Dakota High School Survey
Rate Increase ↑, rate decrease ↓, or no statistical change = in rate from 2017-2019.
*Sources:* https://www.cdc.gov/healthyyouth/data/yrbs/results.htm; https://www.nd.gov/dpi/districtsschools/safety-health/youth-risk-behavior-survey

| | ND 2015 | ND 2017 | ND 2019 | ND Trend ↑, ↓, = | Rural ND Town Average | Urban ND Town Average | National Average 2019 |
|---|---|---|---|---|---|---|---|
| **Injury and Violence** | | | | | | | |
| % of students who rarely or never wore a seat belt (when riding in a car driven by someone else) | 8.5 | 8.1 | 5.9 | = | 8.8 | 5.4 | 6.5 |
| % of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey) | 17.7 | 16.5 | 14.2 | = | 17.7 | 12.7 | 16.7 |
| % of students who talked on a cell phone while driving (on at least one day during the 30 days before the survey) | NA | 56.2 | 59.6 | = | 60.7 | 60.7 | NA |
| % of students who texted or e-mailed while driving a car or other vehicle (on at least one day during the 30 days before the survey) | 57.6 | 52.6 | 53.0 | = | 56.5 | 51.8 | 39.0 |
| % of students who were in a physical fight on school property (one or more times during the 12 months before the survey) | 5.4 | 7.2 | 7.1 | = | 7.4 | 6.4 | 8.0 |
| % of students who experienced sexual violence (being forced by anyone to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to, one or more times during the 12 months before the survey) | NA | 8.7 | 9.2 | = | 7.1 | 8.0 | 10.8 |
| % of students who were bullied on school property (during the 12 months before the survey) | 24.0 | 24.3 | 19.9 | ↓ | 24.6 | 19.1 | 19.5 |
| % of students who were electronically bullied (includes texting, Instagram, Facebook, or other social media ever during the 12 months before the survey) | 15.9 | 18.8 | 14.7 | ↓ | 16.0 | 15.3 | 15.7 |
| % of students who made a plan about how they would attempt suicide (during the 12 months before the survey) | 13.5 | 14.5 | 15.3 | = | 16.3 | 16.0 | 15.7 |
| **Tobacco, Alcohol, and Other Drug Use** | | | | | | | |
| % of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) | 22.3 | 20.6 | 33.1 | ↑ | 32.2 | 31.9 | 32.7 |
| % of students who currently used cigarettes, cigars, or smokeless tobacco (on at least one day during the 30 days before the survey) | NA | 18.1 | 12.2 | **NA** | 15.1 | 10.9 | 10.5 |
| % of students who currently were binge drinking (four or more drinks for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) | NA | 16.4 | 15.6 | = | 17.2 | 14.0 | 13.7 |
| % of students who currently used marijuana (one or more times during the 30 days before the survey) | 15.2 | 15.5 | 12.5 | = | 11.4 | 14.1 | 21.7 |
| % of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use | NA | 14.4 | 14.5 | = | 12.8 | 13.3 | 14.3 |


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| Weight Management, Dietary Behaviors, and Physical Activity | | | | | | | |
|---|---|---|---|---|---|---|---|
| % of students who were overweight (>= 85th percentile but <95th percentile for body mass index) | 14.7 | 16.1 | 16.5 | = | 16.6 | 15.6 | 16.1 |
| % of students who had obesity (>= 95th percentile for body mass index) | 13.9 | 14.9 | 14.0 | = | 17.4 | 14.0 | 15.5 |
| % of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey) | 3.9 | 4.9 | 6.1 | = | 5.8 | 5.3 | 6.3 |
| % of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the seven days before the survey) | 4.7 | 5.1 | 6.6 | = | 5.3 | 6.6 | 7.9 |
| % of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the seven days before the survey) | 18.7 | 16.3 | 15.9 | = | 17.4 | 15.1 | 15.1 |
| % of students who did not drink milk (during the seven days before the survey) | 13.9 | 14.9 | 20.5 | ↑ | 14.8 | 20.3 | 30.6 |
| % of students who did not eat breakfast (during the seven days before the survey) | 11.9 | 13.5 | 14.4 | = | 13.3 | 14.1 | 16.seven |
| % of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey) | NA | 2.seven | 2.8 | = | 2.1 | 2.9 | NA |
| % of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the seven days before the survey) | NA | 51.5 | 49.0 | = | 55.0 | 22.6 | 55.9 |
| % of students who watched television 3 or more hours per day (on an average school day) | 18.9 | 18.8 | 18.8 | = | 18.3 | 18.2 | 19.8 |
| % of students who played video or computer games or used a computer 3 or more hours per day (for something that was not schoolwork on an average school day) | 38.6 | 43.9 | 45.3 | = | 48.3 | 45.9 | 46.1 |
| **Other** | | | | | | | |
| % of students who ever had sexual intercourse | 38.9 | 36.6 | 38.3 | = | 35.4 | 36.1 | 38.4 |
| % of students who had eight or more hours of sleep (on an average school night) | NA | 31.8 | 29.5 | = | 31.8 | 33.1 | NA |
| % of students who brushed their teeth on seven days (during the seven days before the survey) | NA | 69.1 | 66.8 | = | 63.0 | 68.2 | NA |

# Survey Results

As noted previously, 369 community members completed the survey in communities throughout the counties in the JRMC service area. For all questions that contained an "Other" response, all direct responses may be found in Appendix E. In some cases, a summary of those comments is additionally included in the report narrative. The "Total respondents" number under each heading indicates the number of people who responded to that particular question and the "Total responses" number under the heading depicts the number of responses selected for that question (some questions allow for selection of more than one response).

The survey requested that respondents list their home ZIP Code. While not all respondents provided a ZIP Code, 85 did, revealing that a large majority of respondents (88%, N=238) lived in Jamestown. These results are shown in Figure 5.


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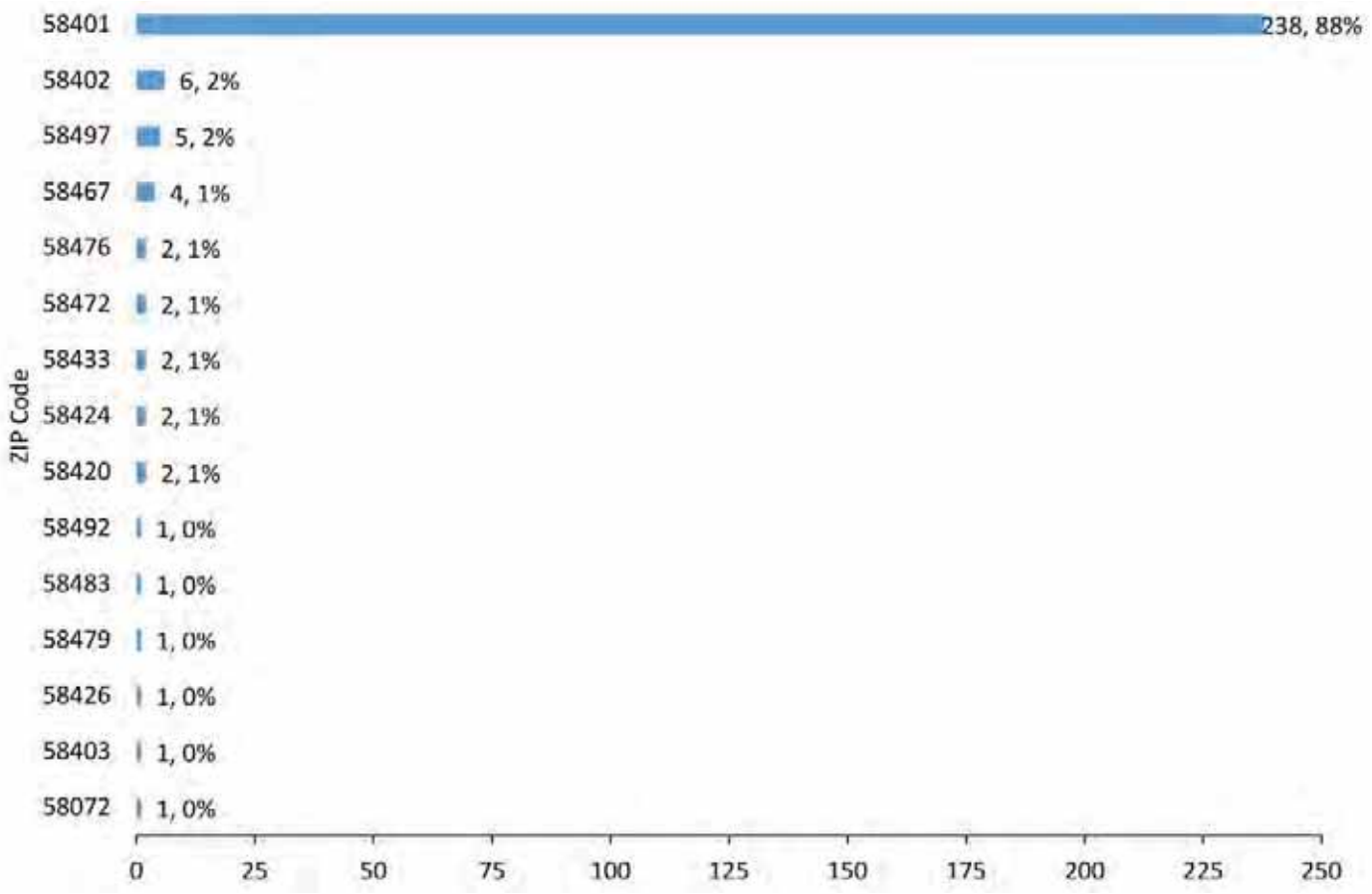
**Figure 5: Survey Respondents' Home ZIP Code**
**Total respondents: 269**




Survey results are reported in six categories: demographics; healthcare access; community assets and challenges; community concerns; delivery of healthcare; and other concerns or suggestions to improve health.

## Survey Demographics

To better understand the perspectives being offered by survey respondents, survey-takers were asked a few demographic questions. Throughout this report, numbers (N) are reported instead of just percentages (%) because percentages can be misleading with smaller numbers. Survey respondents were not required to answer all questions.

With respect to demographics of those who chose to complete the survey:

- 44% (N=132) were age 55 or older.
- The majority (76%, N=225) were female.
- More than two-thirds of the respondents (70%, N=210) had bachelor's degrees or higher.
- The number of those working full time (72%, N=214) was more than five times higher than those who were retired (13%, N=39).
- 97% (N=289) of those who reported their ethnicity / race were White / Caucasian.
- 19% (N=54) of the population had household incomes of less than $50,000.

Figures 6 through 12 show these demographic characteristics. They illustrate the range of community members' household incomes and indicate how this assessment took into account input from parties who represent the varied interests of the community served, including a balance of age ranges, those in diverse work situations, and community members with lower incomes.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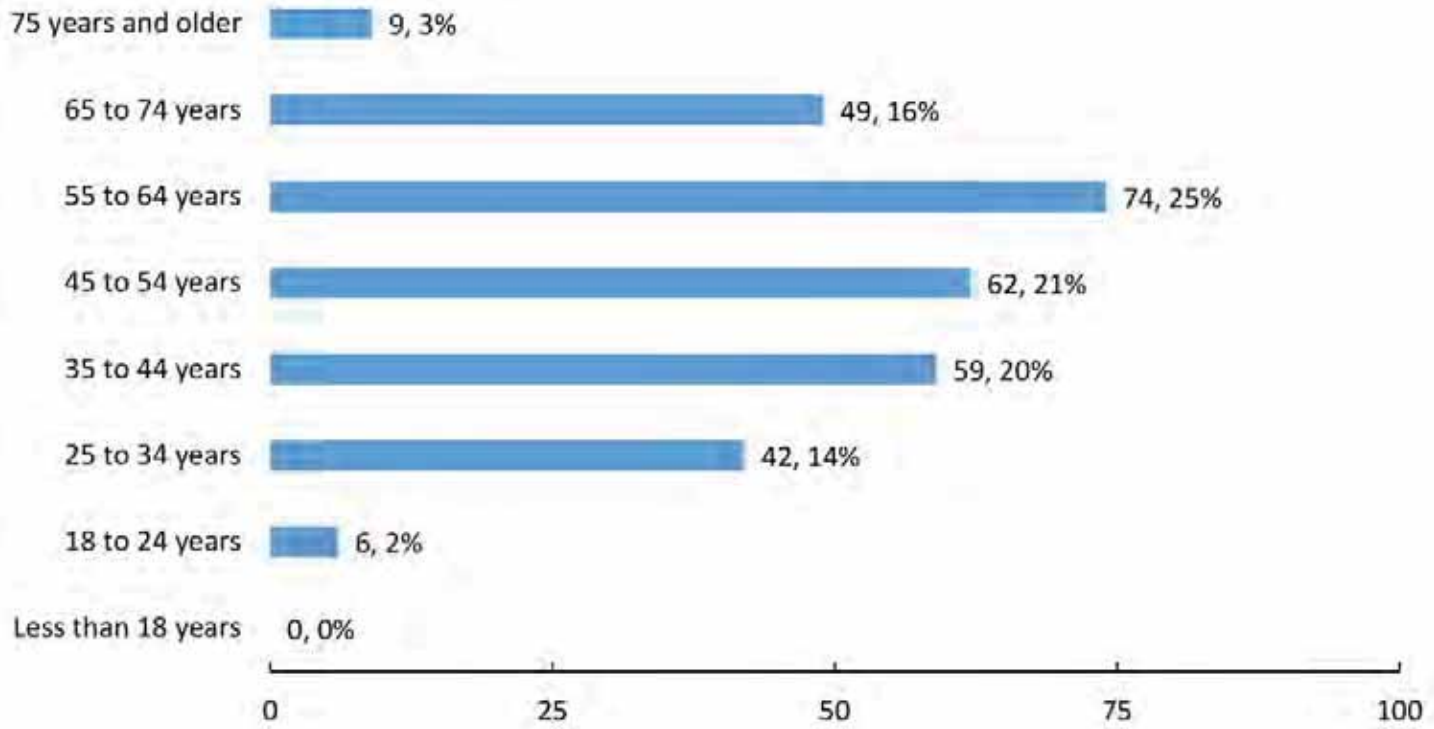
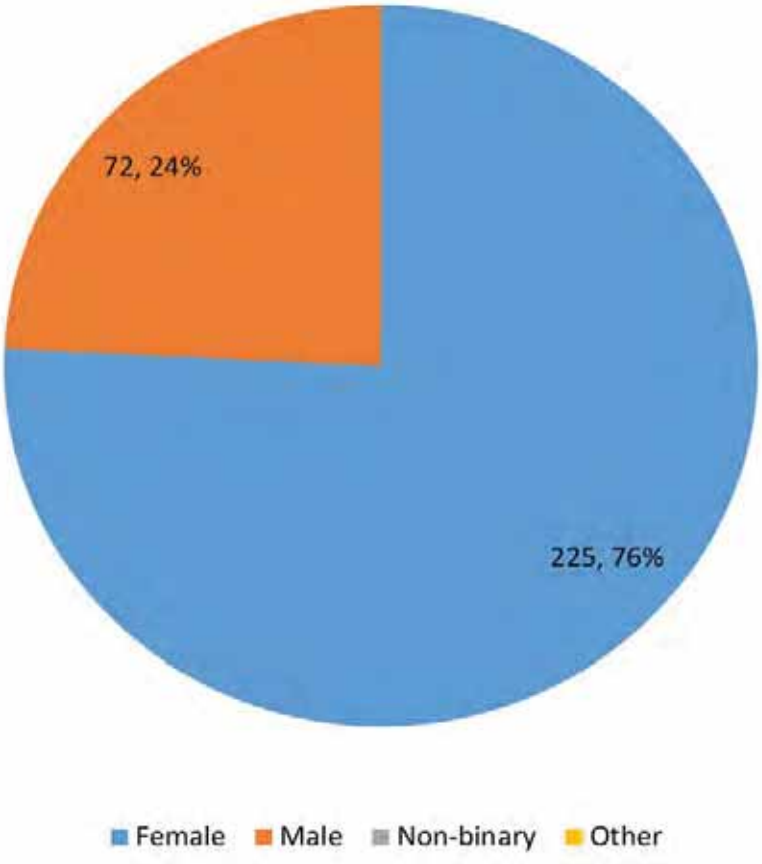
## Figure 6: Age Demographics of Survey Respondents
## Total respondents = 301




In CHNAs, people younger than age 18 are not questioned.

## Figure 7: Gender Demographics of Survey Respondents
## Total respondents = 297




As is often the case, females were three times as likely to complete the survey as males.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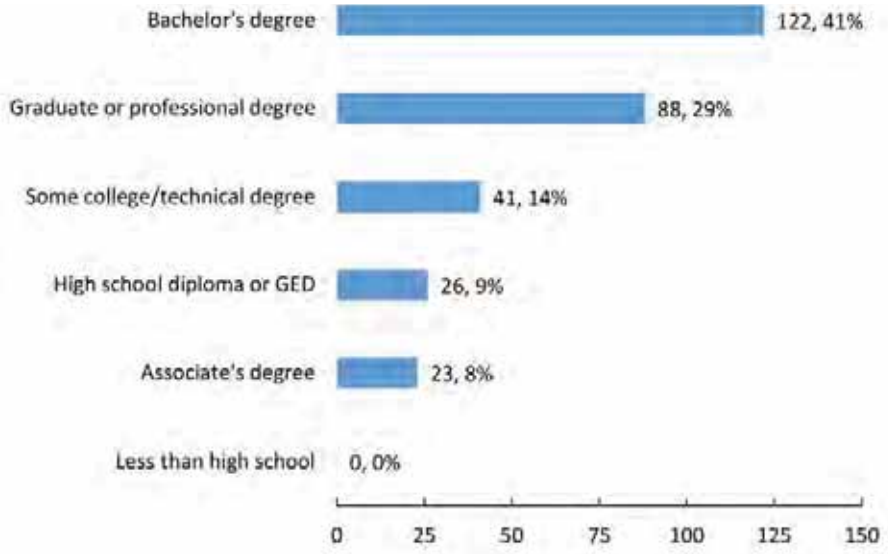
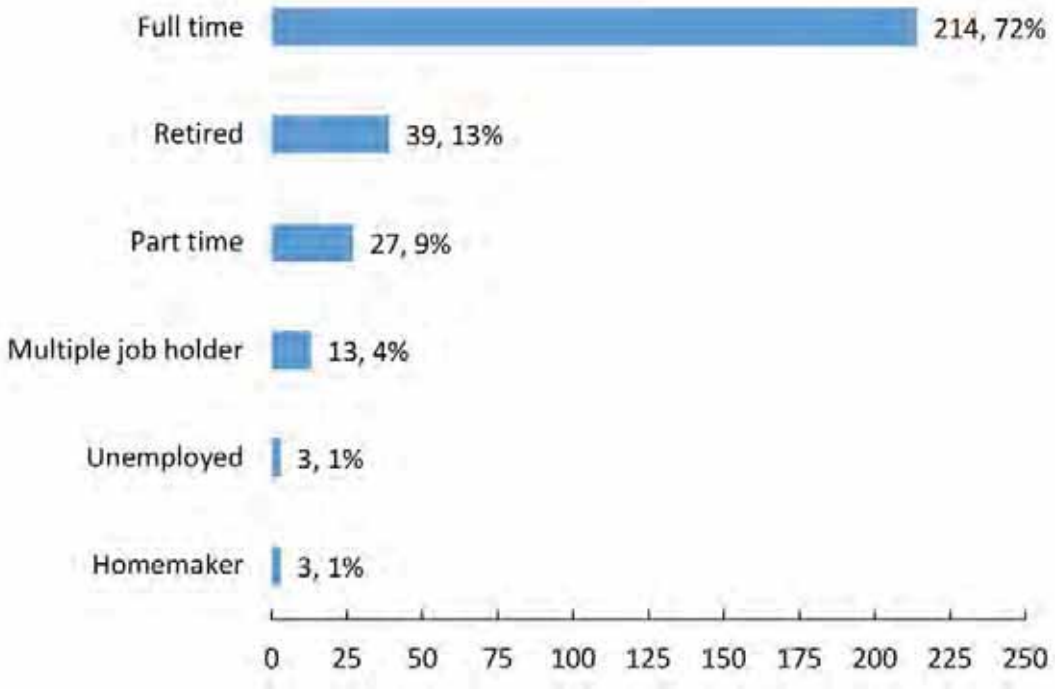
## Figure 8: Educational Level Demographics of Survey Respondents
## Total respondents = 300




Eighty-four percent (251) of respondents had at least some college or a technical degree (Figure 8). Thirty-nine people (13%) indicated that they were retired, and 254 of survey-takers reported that they worked part time, full time, or had multiple jobs (Figure 9).

## Figure 9: Employment Status Demographics of Survey Respondents
## Total respondents = 299




Of those who provided a household income, 4% (N=12) of community members reported a household income of less than $25,000. Forty percent (N=113) indicated a household income of $100,000 or more. This information is shown in Figure 10.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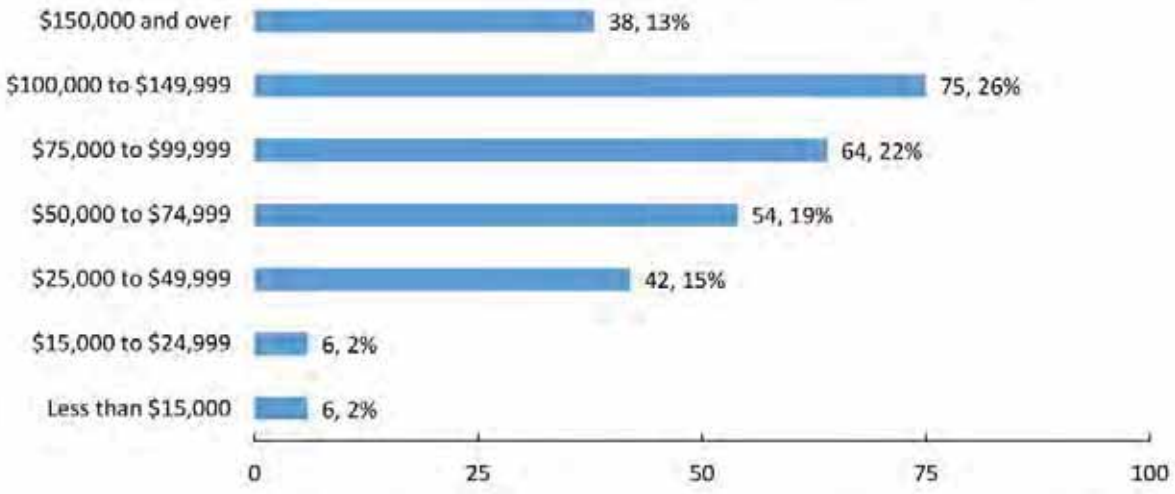
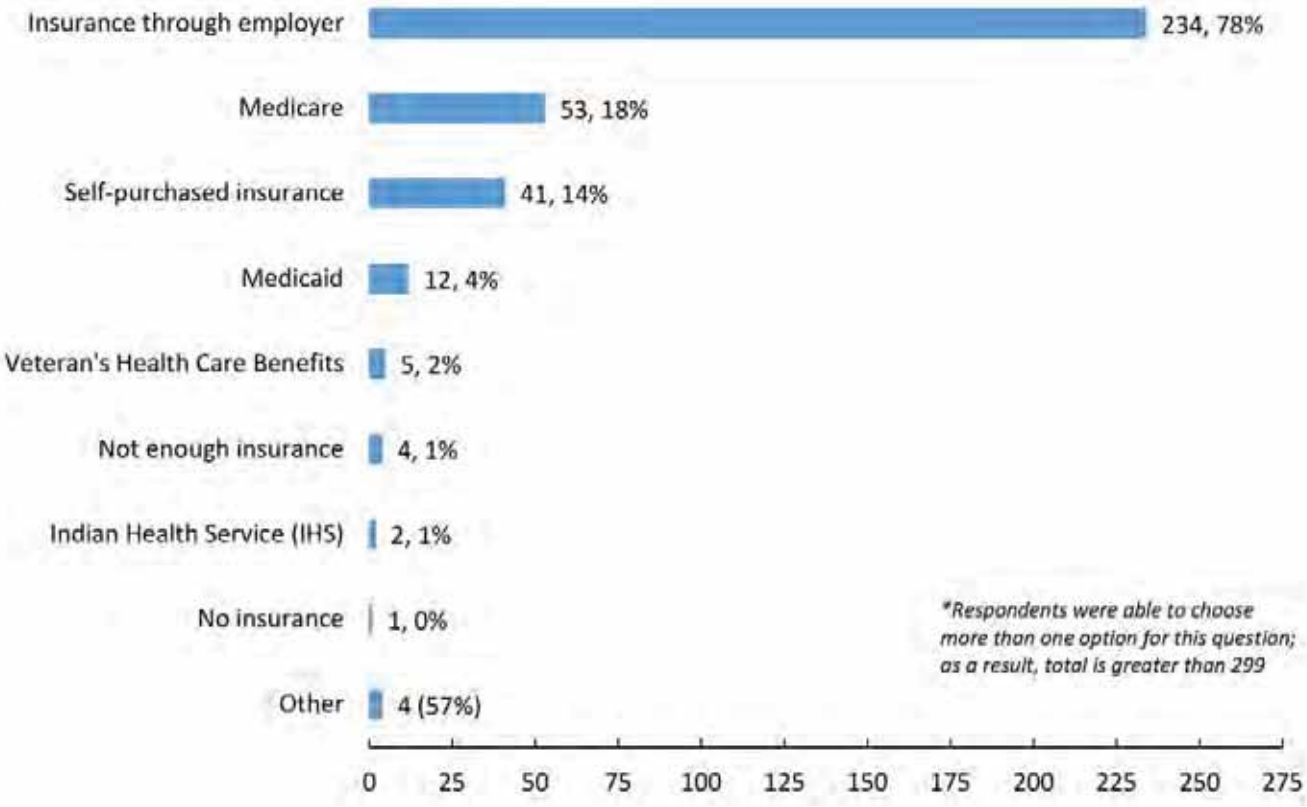
## Figure 10: Household Income Demographics of Survey Respondents
## Total respondents = 285




Community members were asked about their health insurance status, which is often associated with whether people have access to healthcare. Only 1% (N=5) of the respondents reported having no health insurance or being underinsured. The most common insurance types were insurance through one's employer (78%, N=234), followed by Medicare (18%, N=53), and then self-purchased (14%, N=41). See Figure 11.

## Figure 11: Health Insurance Coverage Status of Survey Respondents
## Total respondents = 299*




As shown in Figure 12, nearly all of the respondents were White / Caucasian (97%). This was slightly greater than the race / ethnicity composition of the overall population of Stutsman County; the U.S. Census indicates that 93.7% of the county's population is White / Caucasian.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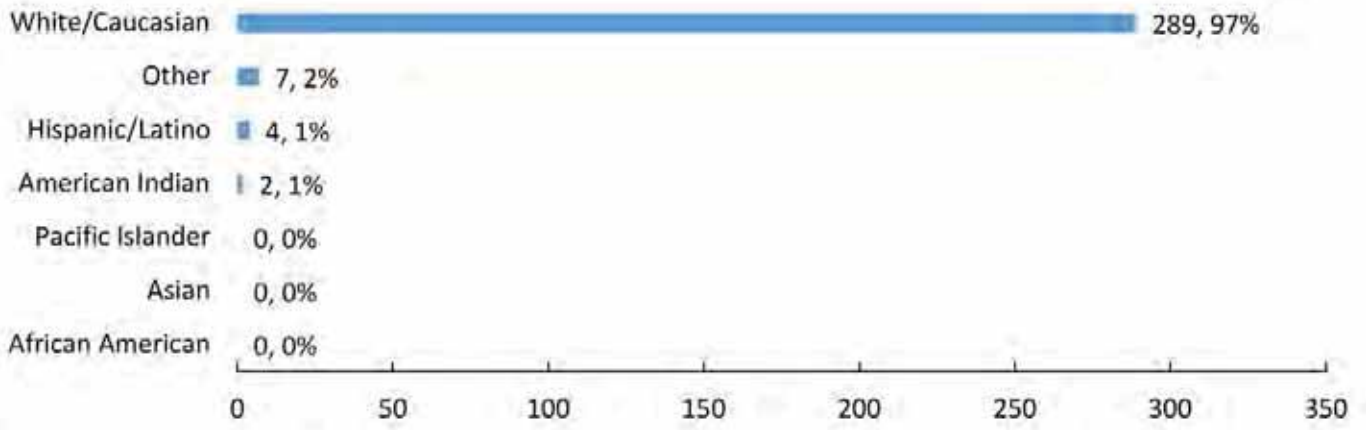
### Figure 12: Race/Ethnicity Demographics of Survey Respondents
### Total respondents = 299*



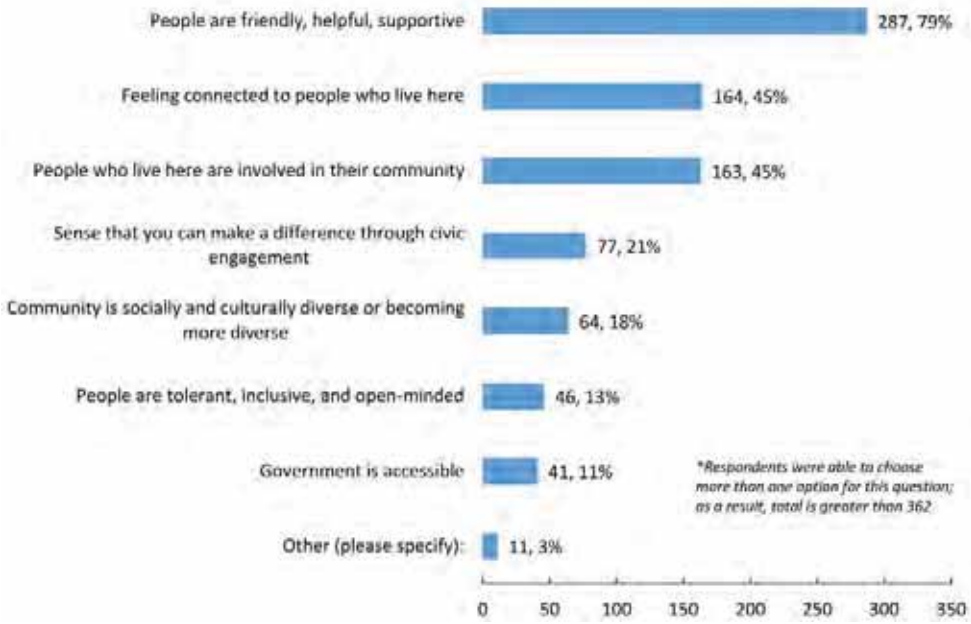

## Community Assets and Challenges

Survey respondents were asked what they perceived as the best things about their community in four categories: people, services and resources, quality of life, and activities. In each category, respondents were given a list of choices and asked to pick the three best things. Respondents occasionally chose less than three or more than three choices within each category. If more than three choices were selected, their responses were not included. The results indicate there is consensus (with at least 200 respondents agreeing) that community assets include:

- People are friendly, helpful, supportive (287);
- Family-friendly; good place to raise kids (235);
- Closeness to work and activities (227);
- Year-round access to fitness opportunities (210); and
- Healthcare (206).

Figures 13 to 16 illustrate the results of these questions.

### Figure 13: Best Things About the PEOPLE in Your Community
### Total responses = 362*





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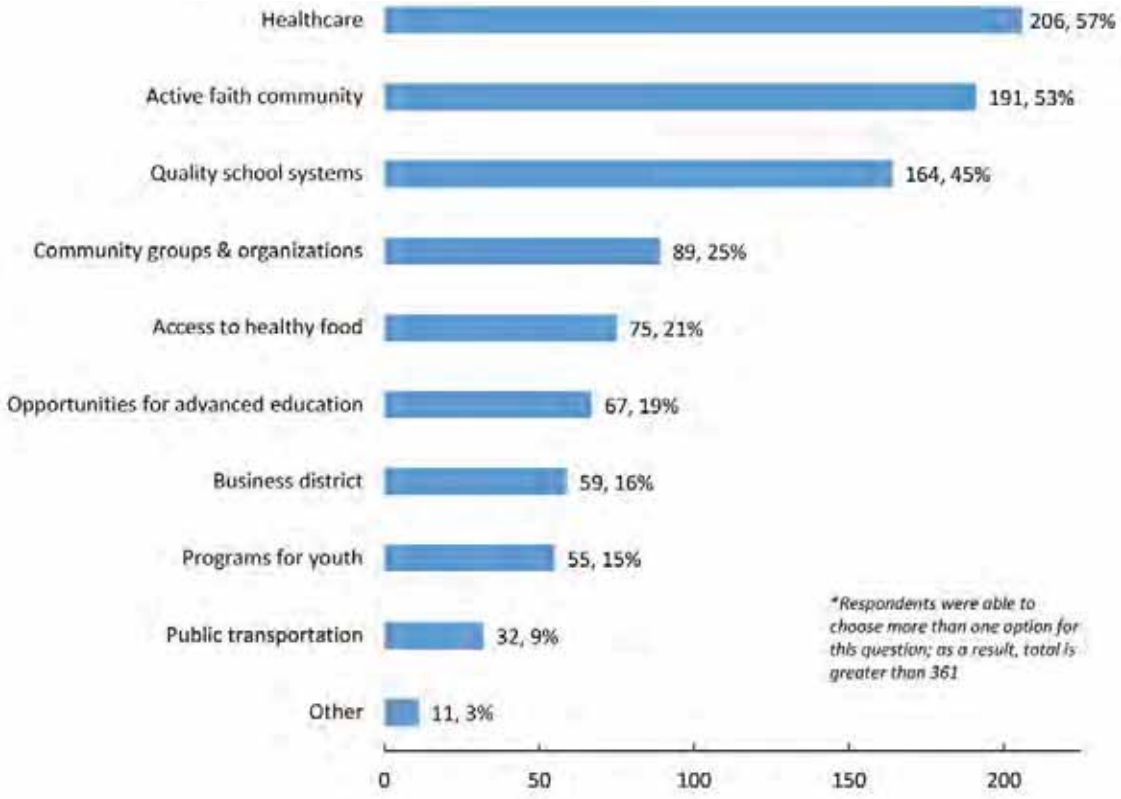
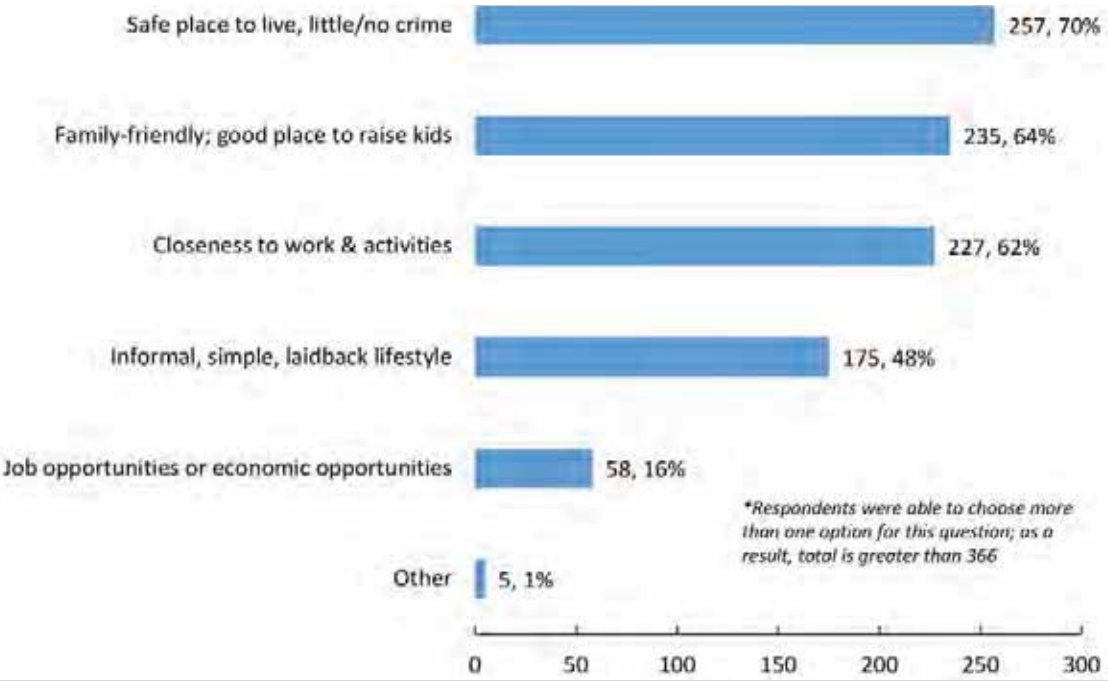
Included in the "Other" category of the best things about the people were it is a quiet community with little traffic, community supportive of the school, and the people are caring.

## Figure 14: Best Things About the SERVICES AND RESOURCES in Your Community
## Total responses = 361*




Respondents who selected "Other" specified that the Jamestown Art Center, homeless shelter and detox center, sports and cultural events to attend, South Central Human Services Center, Sanford, and outdoor activities were among some of the best resources in the community.

## Figure 15: Best Things About the QUALITY OF LIFE in Your Community
## Total responses = 366*





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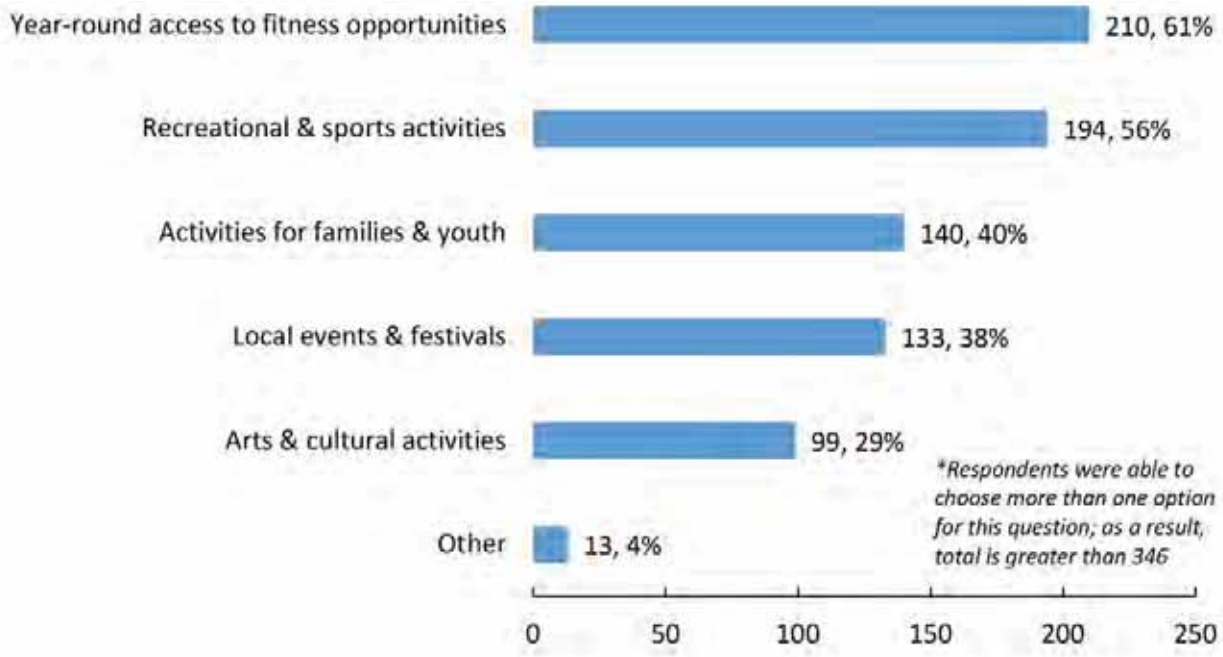
## Figure 16: Best Thing About the ACTIVITIES in Your Community
## Total responses = 346*




Respondents who selected "Other" specified places to go to get into nature, active religious community, easy to get around, and adult art center classes as some of the best activities in the community.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## Community Concerns

At the heart of this CHNA was a section on the survey asking survey respondents to review a wide array of potential community and health concerns in five categories and pick their top three concerns. The five categories of potential concerns were:

- Community / environmental health
- Availability / delivery of health services
- Youth population
- Adult population
- Senior population

With regard to responses about community challenges, the most highly voiced concerns (those having at least 100 respondents) were:

- Attracting and retaining young families (N=170)
- Drug use and abuse (including prescription drug abuse) (N=165)
- Cost of long-term / nursing home care (N=155)
- Not enough jobs with livable wages, not enough to live on (N=144)
- Depression / anxiety - Youth (N=143)
- Drug use and abuse (including prescription drug abuse) - Adult (N=134)
- Depression / anxiety - Adult (N=132)
- Alcohol use and abuse - Adult (N=129)
- Availability of resources to help the elderly stay in their homes (N=123)
- Alcohol use and abuse - Youth (N=120)
- Smoking and tobacco use, exposure to second-hand smoke, or vaping (juuling) (N=115)
- Availability of specialists (N=100)

The other issues that had at least 70 votes included:

- Depression / anxiety - Seniors (N=89)
- Ability to meet needs of older population (N=78)
- Stress - Adult (N=80)
- Obesity / overweight - Adult (N=86)
- Suicide - Youth (N=85)
- Cost of healthcare services (N=75)
- Availability of mental health services (N=82)
- Cost of health insurance (N=74)
- Not enough affordable housing (N=72)

Figures 17 through 22 illustrate these results.


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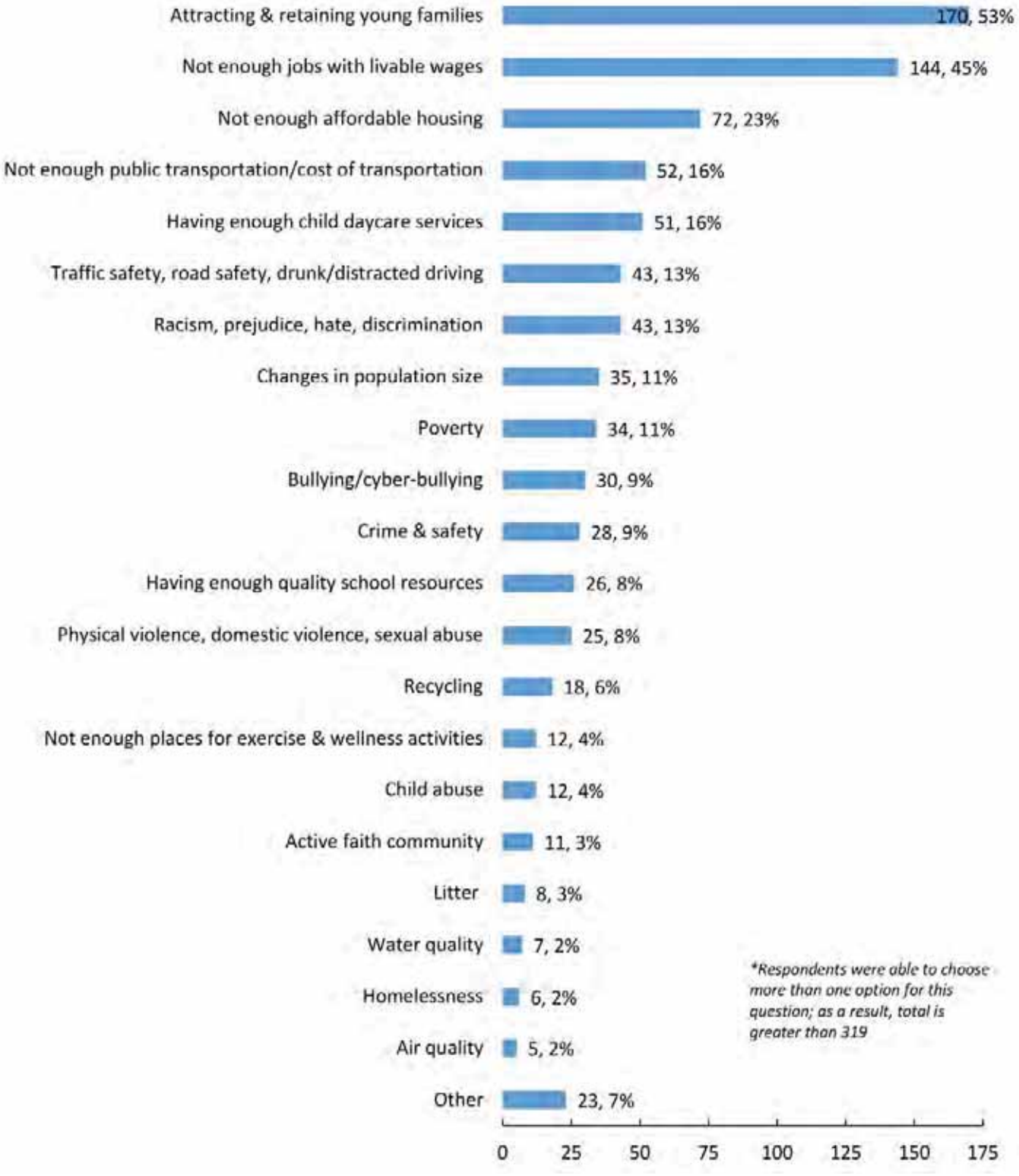
## Figure 17: Community/Environmental Health Concerns
## Total responses = 319*




In the "Other" category for community and environmental health concerns, the following were listed: lack of detox and mental health facilities, drug addiction, releasing inmates into the community, retail to keep people here, law enforcement profiling, not enough workforce to fill job positions, affordable activities for kids outdoors (such as an outdoor pool), high property taxes, amount of sexual predators, safety of children riding bikes/bike path needed, child abuse/neglect, and affordable childcare options.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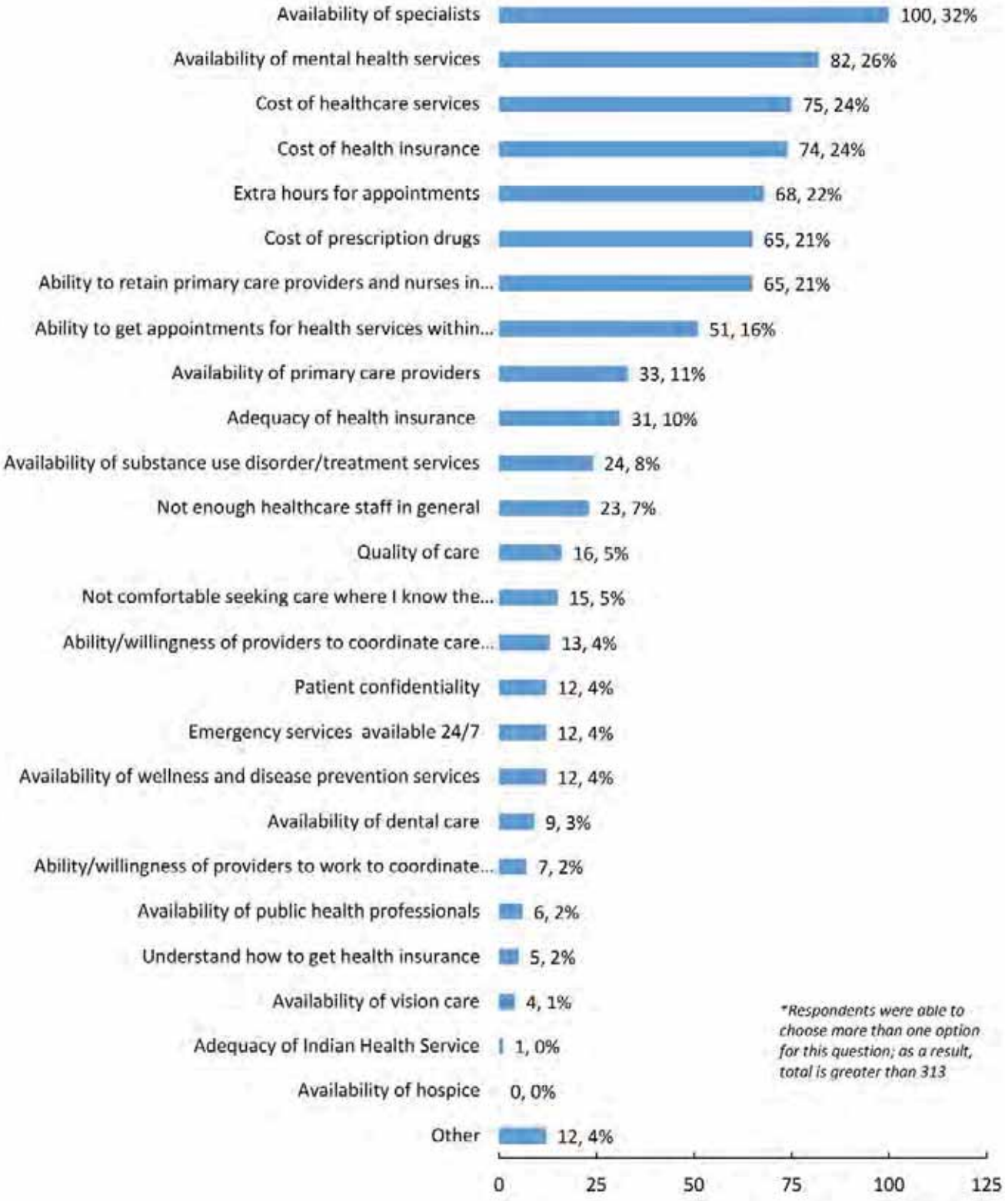
## Figure 18: Availability/Delivery of Health Services Concerns
## Total responses = 313*




Several respondents who selected "Other" identified concerns in the availability/delivery of health services stated that there are few dental care services that accept dental insurance carriers used locally. Additionally, they indicated that the community is lacking medical specialists (OB, cardiology, pulmonology, etc.), mental health and addiction services, and quality medical personnel. An affordable wellness facility is also not available. A couple also identified it was difficult to find home care/home assistance.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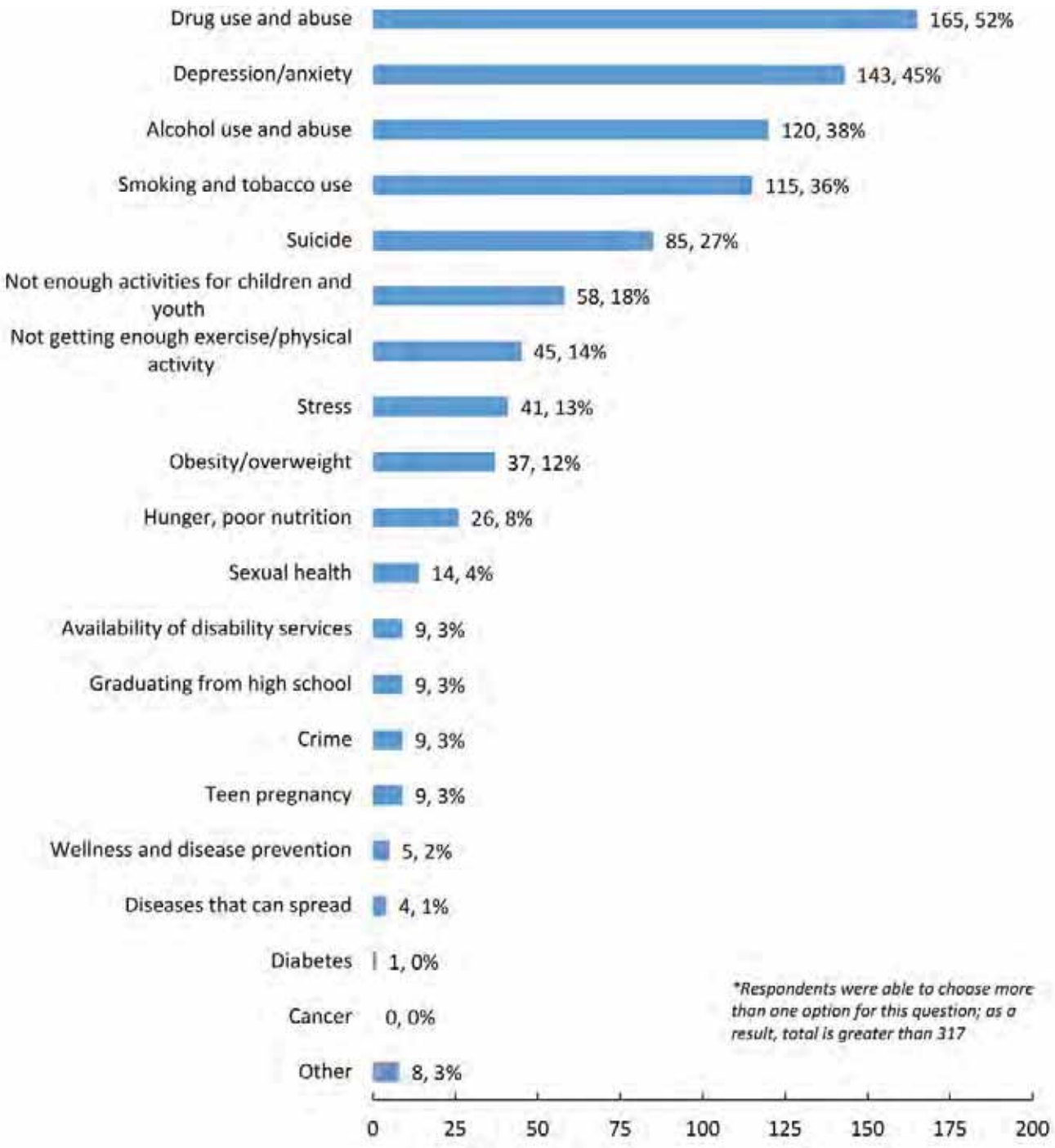
## Figure 19: Youth Population Health Concerns
## Total Responses = 317*




Listed in the "Other" category for youth population concerns were alcohol, drug and tobacco / vaping abuse, suicide, obesity / weight, and bullying. There is a lack of easily accessible reproductive healthcare and a lack of mental health services for youth.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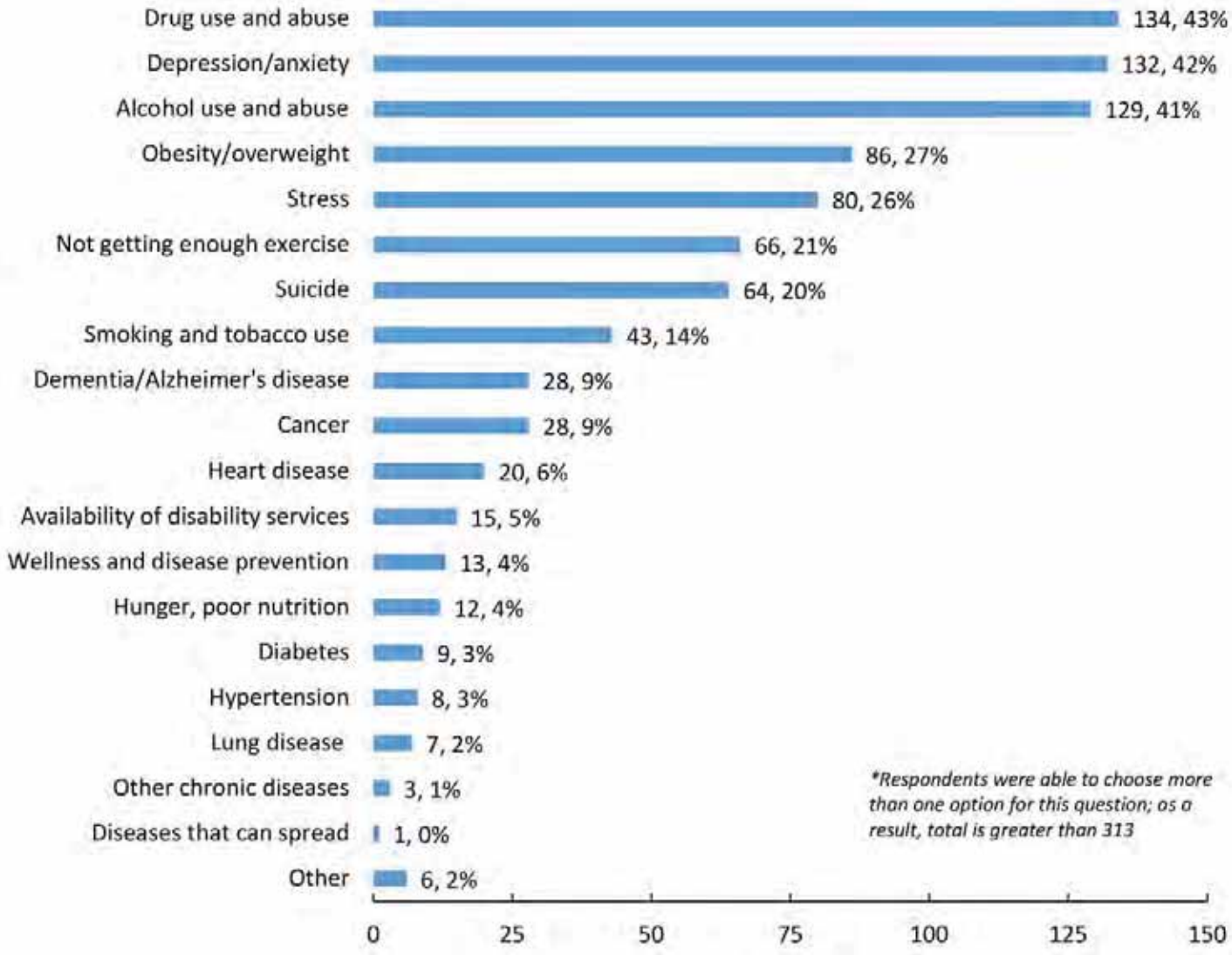
## Figure 20: Adult Population Concerns
## Total responses = 313*




Intimate partner violence, not enough going on for adults on the weekends, mental health, and poor education were indicated in the "Other" category for adult population concerns. Also identified was the need for more qualified/trustworthy individuals available to help in homes.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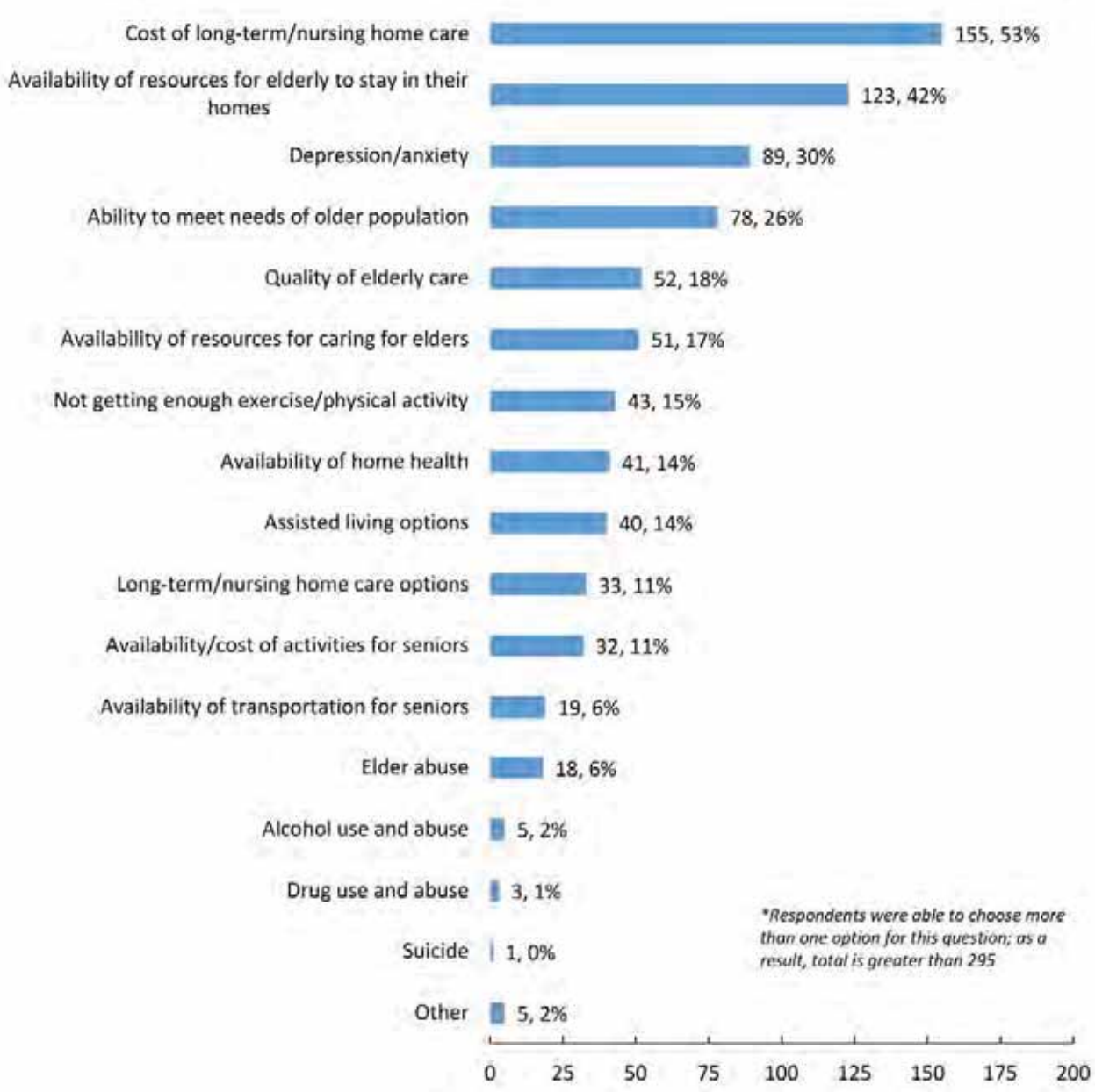
## Figure 21: Senior Population Concerns
## Total responses = 295*




In the "Other" category, elder neglect, not enough staff in nursing homes, and isolation due to COVID were listed as senior population concerns.

In an open-ended question, respondents were asked what single issue they feel is the biggest challenge facing their community. Two categories emerged above all others as the top concerns:

1. Mental health and substance abuse issues
2. Expensive living costs, including lack of livable wages, high cost of housing, high taxes

Other biggest challenges that were identified by multiple people were slow or no growth within the community, COVID-19, assistance for the elderly, and lack of activities. A full listing may be found in Appendix G.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## Delivery of Healthcare

The survey asked residents what they see as barriers that prevent them, or other community residents, from receiving healthcare. The most prevalent barrier perceived by residents was not enough specialists (N=99), not affordable (N=83), and not enough evening or weekend hours (N=83). After these, the next most commonly identified barriers were not able to get appointment/limited hours (N=77), having limited or no insurance (N=69), and not able to see the same provider over time (N=63). Comments included concerns about liability, being too stubborn to go to the doctor, dentists not accepting insurance, a need for mental health services, and job or family obligations.

Figure 22 illustrates these results.

### Figure 22: Perceptions About Barriers to Care
### Total responses = 202*

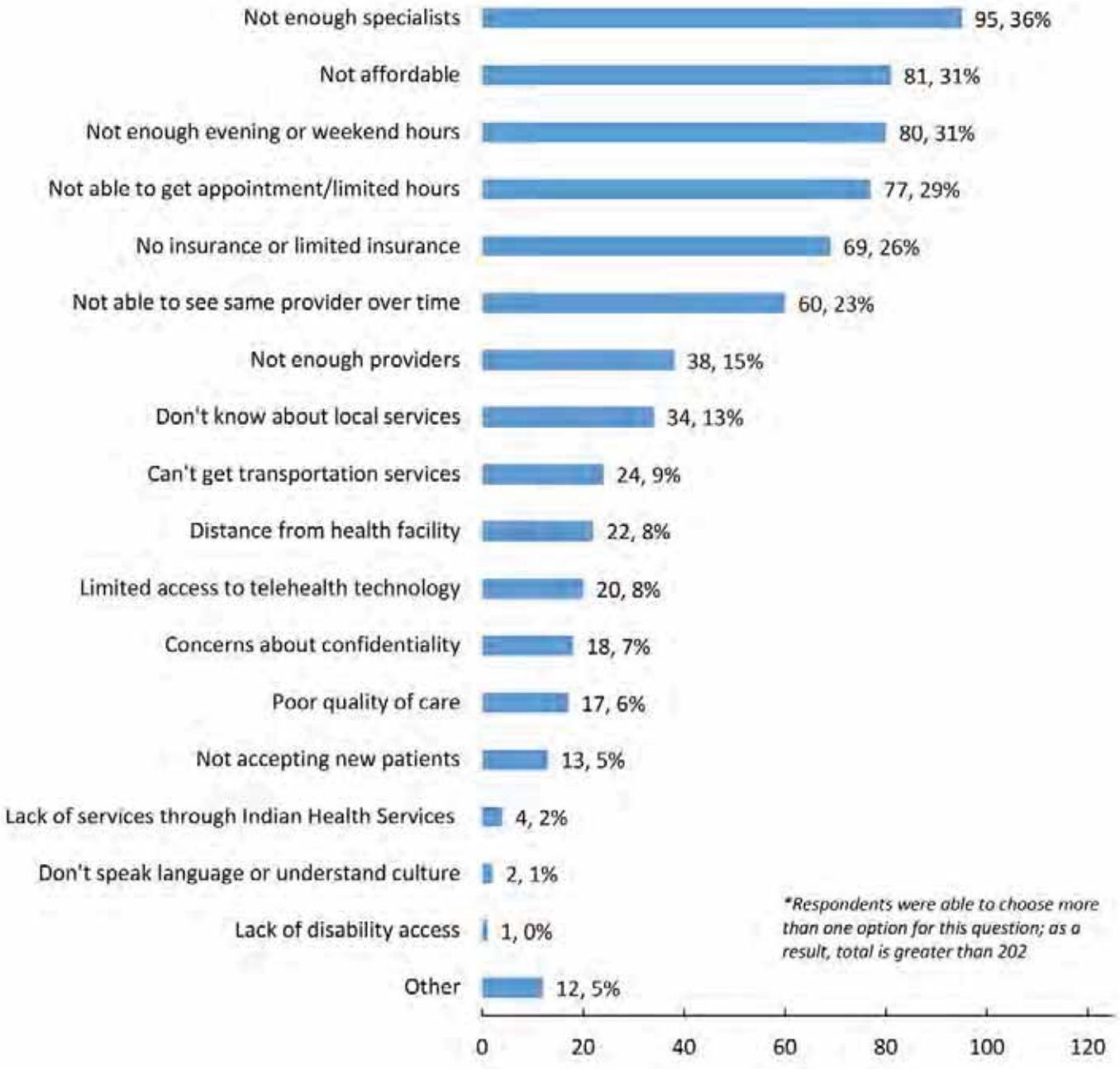


Figure 23 shows the results from asking respondents where they are most likely to seek out trustworthy health information.


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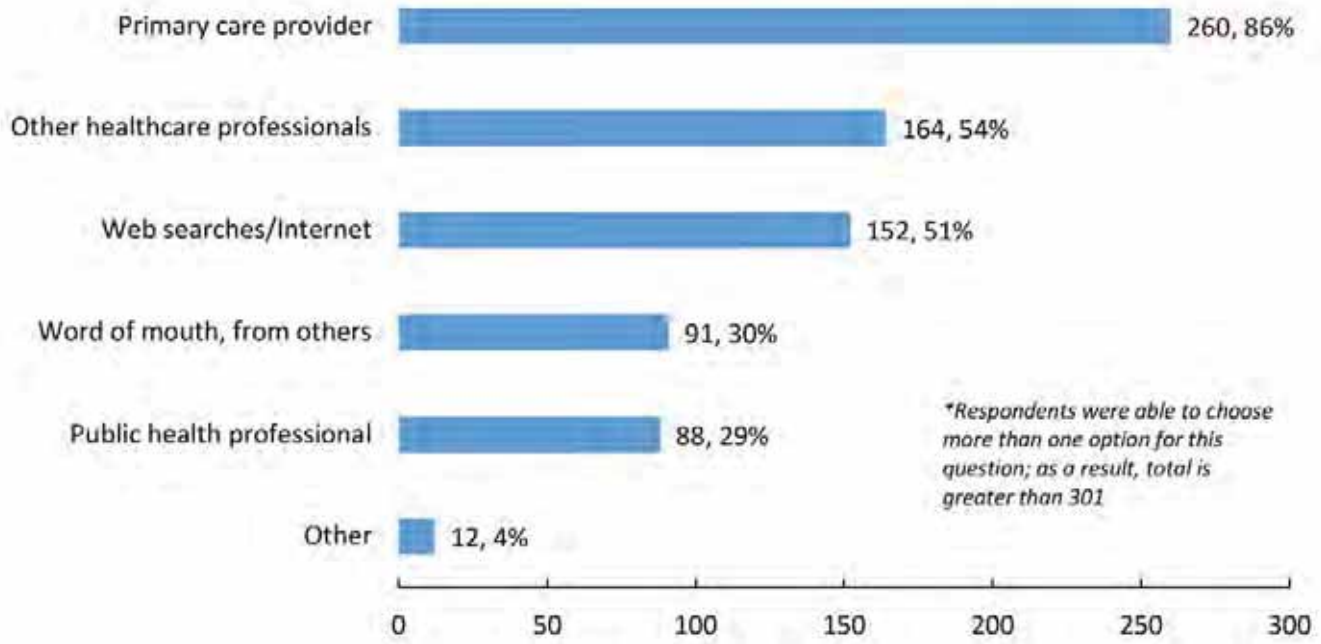
## Figure 23: Sources of Trusted Health Information
## Total responses = 301*




"Other" responses for sources of trusted health information included Fargo or Bismarck providers, physician family member, specialists, agencies that help individuals navigate the system, pharmacists, scholarly journals, reliable health organization, and themselves if they have a health profession background.

In an open-ended question, respondents were asked what specific healthcare services, if any, they think should be added locally. The number one desired service to add locally was mental health followed by dermatology. Other requested services included:

- Acupuncturist
- Cardiology
- Dentist
- Extended stay facility (more than just a trauma center)
- General physician
- General surgeon (additional)
- Home checks on the elderly
- OBGYN
- Oncology care
- Ophthalmology
- Pediatrician
- Substance treatment

Although the key informants generally felt that the community members were aware of the majority of the health system and public health services, there were several services that were mentioned of which the interviewees were unaware. It was felt that the hospital should increase marketing efforts of pediatric providers, maternity care (labor / delivery), Cancer Center, nutritional counseling, and the therapy service at JRMC. It was recommended that CVHD increase marketing efforts for car seat checkups, education provided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to children and youth in the community, nursing services, emergency preparedness, and family planning.

The final question on the survey asked respondents to share concerns and suggestions to improve the delivery of local healthcare. The majority of responses focused on cost of healthcare, ability to get appointments, and increase specialist care and mental health services.

Cost of healthcare may be prohibitive for many even with insurance due to high deductibles and coinsurance. In order for people to seek care, they must be able to afford it. It would be nice if healthcare providers would make it easier to get answers on costs.

When it comes to appointments, a large number of people indicated that they would like more specialists, even if that occurs through telemedicine. They want to remain local when accessing care. Several expressed a need for more after-hours appointment availability / more convenient walk-in hours and detox options past 5:00 pm. It is difficult for those who work full time or with children to make appointments if locations are only open 8:00 am to 5:00 pm. There is also a desire for more open hours around the clock and on weekends for healthcare. The only option in the evenings and on weekends is to go the emergency room, which is a very expensive alternative. Others indicated that it is hard to get an appointment with their primary care provider.

Respondents indicated needs when it comes to workforce. A care coordinator, a single point of contact to help in coordinating care for people with multiple medical issues, would be very beneficial emotionally and financially for the patients. It was indicated that there should be greater promotion in the school systems toward healthcare along with providing grants to promote people to stay local. This was a big need before COVID-19, and the stress of COVID-19 really highlighted the need. Possibly due to the lack of providers available, some expressed concern about being rushed through appointments and not getting the time needed for the provider to properly diagnose and educate the patient. JRMC needs to discover ways to find and retain medical care professionals. With some medical care professionals aging, will there be others to replace them when they retire?

Mental health service and addiction services were recurrent needs expressed by respondents. Currently, access to mental health service is a month or more out from initial appoint request. This need is for not only adults but also children. Support groups for family of people with mental health / psychiatric issues were also requested. The Jamestown area is sorely lacking not only in the community, but also in the state for inpatient and outpatient behavioral health services, especially for adolescents.

Transportation to jobs in Jamestown is very limited for people who do not have a car or know how to drive. There are many young people who have no insurance and may have part-time jobs at many places but are sometimes four to five miles away. If they work in fast food and walk two miles to work, they are all sweaty when they get to work from walking in the summer. It wears them out before they even get to work. Young people who are behind on child support payments, see no future working because all their money goes for transportation and childcare and they do not have enough to eat, pay rent, and pay utilities.

Other items indicated included the need for increased preventative care such as fewer pills, more healthy foods and habits. It's a hard task considering most young people don't go in for their preventative exams and come in when it's too late. Insurance covers it, but maybe there should be a better incentive. We need to start improving people's lives and not just maintaining them. The community needs to advertise so all people know what resources are available. As with everything in Jamestown, employers need to pay employees what they are worth, or Jamestown will continue to just be a stepping stone, a place to get experience for the next real job. This is true for the police, teachers, etc.


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There were several comments indicating that the local healthcare is great, which included both JRMC and CVHD.

A full listing of all comments is located in Appendix G.

# Findings from Key Informant Interviews

Questions about the health and well-being of the community, similar to those posed in the survey, were explored during key informant interviews with community members and health professionals. The themes that emerged from these sources were wide-ranging, with some directly associated with healthcare and others more rooted in broader social and community matters.

Generally, overarching issues that developed during the interviews can be grouped into three categories (listed in alphabetical order):

- Behavior health issues
  - o Alcohol use and abuse – all ages
  - o Depression / anxiety / stress / suicide – all ages
  - o Drug use and abuse – all ages
  - o Not getting enough physical activity – youth
- Housing of the elderly
  - o Cost of long-term / nursing home care
  - o Availability of resources to keep the elderly in their homes
- Maintaining / growing the population
  - o Attracting and retaining young families
  - o Not enough jobs with livable wages, not enough to live on

To provide context for the identified needs, following are some of the comments made by those interviewed about these issues:

## Behavior health issues

### *(alcohol use and abuse, depression/anxiety/stress/suicide, drug use and abuse, not getting enough physical activity)*

- On a day-to-day basis, about 20% of law enforcement calls are mental health related – a lot come from populations moving to Jamestown that need services (come because of prison or state hospital). Then those expenses incurred by these people coming from around the state get put on local taxpayers – not sure that jobs offered locally offset the burden on the city of Jamestown.
- Don't think that there is enough focus on mental health or resources. There is a stigma that presents a barrier to seeking care (this includes depression, anxiety, stress).
- There doesn't seem to be many options for mental health services. There are lots of stories about people trying to make appointments and getting waitlisted a month or two out, but they need help now.
- Anxiety is a top concern.
- People are struggling right now everywhere, hard to access mental health services in Jamestown, parents are having issues with their youth and don't know where to go – go through everything they can locally and then they are stuck.
- Drug use and abuse – could apply to alcohol too, pretty much everyone knows someone who has pretty


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much ruined their life because of drugs, becomes a drain on society / the community – not able to work, losing insurance, easy to become a generational problem – bigger consequences than someone who doesn't take care of just themselves.

- Availability of mental health services, including substance (drugs and alcohol) use, not enough services for the big population that gets attracted by the existing services offered in the community.
- There is still a big stigma in North Dakota about accessing mental health services; people aren't comfortable coming forward and then they self-medicate. The pandemic has exacerbated lots of those issues, healthcare workers with pandemic trauma and deaths and then people not taking the pandemic seriously. There are not enough resources as it is, combined with cultural factors, becomes even worse.
- Suicide in youth seems more frequent, could be in adults too. Have had five in the last week-and-a-half.
- Overall wellness is important – a lot of areas fit into this regarding taking care of yourself physically, but also, are you well socially? Financially? If you aren't well, are there coping mechanisms in place to help you deal with things?

## Housing of the elderly

*(cost of long-term/nursing home care, availability of resources to keep the elderly in their homes)*

- Long-term care facilities have transportation, but what resources are available to help the elderly who live alone to get around?
- There are many individuals who don't want to leave their homes.

## Maintaining/growing the population

*(attracting and retaining young families, not enough jobs with livable wages/not enough to live on)*

- Growth is important for the future – lose younger people to Bismarck / Fargo because of better paying jobs. We need to figure out better ways to bring businesses / companies in locally.
- Need more things for people to do for activities – not necessarily more gyms but need more outside things for when the weather is warmer like walking paths, bike paths – would be beneficial for all ages.
- Ask any company / organization to do whatever they can to encourage employees / friends / coworkers to be actively involved in the community however they would like to – sports, clubs, boards to stay engaged because that's necessary as we go through life, important for overall well-being that we bring new people into our social circles.
- Not enough affordable housing: people get written off because of mental health concerns – get evicted when they were in a bad place and now they can't get housing when they're in a better place, landlords not willing to give people another chance, leads to homelessness.

## Community Engagement and Collaboration

Key informants were asked to weigh in on community engagement and collaboration of various organizations and stakeholders in the community. Specifically, participants were asked, "On a scale of 1 to 5, with 1 being no collaboration / community engagement and 5 being excellent collaboration / community engagement, how would you rate the collaboration / engagement in the community among these various organizations?" This was not intended to rank services provided. They were presented with a list of 13 organizations or community segments to score. According to these participants, the hospital, emergency services, and economic development are the most engaged in the community. The averages of these scores (with 5 being "excellent" engagement or collaboration) were:


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- Public health (4.5)
- Hospital (healthcare system) (4.25)
- Economic development organizations (4.0)
- Schools (4.0)
- Faith-based (3.75)
- Human services agencies (3.75)
- Law enforcement (3.75)
- Social services (3.75)
- Clinics not affiliated with the main health system (3.5)
- Emergency services, including ambulance and fire (3.5)
- Long-term care, including nursing homes and assisted living (3.5)
- Business and industry (3.0)
- Pharmacy (3.0)
- Other local health providers, such as dentists and chiropractors (2.75)

# Priority of Health Needs

A community group that consisted of the key informant interviewees was sent a prerecorded presentation on March 30, 2021. The presentation included a CRH representative giving the interviewees a summary of this report's findings, including background and explanation about the secondary data, highlights from the survey results (including perceived community assets and concerns and barriers to care), and findings from the key informant interviews.

Following the community group viewing the prerecorded presentation of the assessment findings, they completed an online survey in which they identified what they perceived as the top four community health needs. All of the potential needs were included in the online survey, and each member checked the four needs they considered the most significant. They were also given the opportunity to leave comments.

The results were totaled and the concerns most often cited were:

- Attracting and retaining young families (5 votes)
- Depression / anxiety in youth (4 votes)
- Availability of mental health services (3 vote)
- Not enough jobs with livable wages (3 vote)

From those top four priorities, each person was emailed a second survey and was instructed to select the one item they felt was the most important. The rankings were:

1. Attracting and retaining young families (5 votes)
2. Depression / anxiety in youth (3 votes)
3. Availability of mental health services (1 vote)
4. Not enough jobs with livable wages (1 vote)


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Following the prioritization process, the number one identified need was attracting and retaining young families. A summary of this prioritization may be found in Appendix F.

### Comparison of Needs Identified Previously

| Top Needs Identified 2018 CHNA Process | Top Needs Identified 2021 CHNA Process |
|---|---|
| • Substance use<br>• Family and social support<br>• Obesity and physical activity | • Attracting and retaining young families<br>• Depression/anxiety in youth<br>• Availability of mental health sciences<br>• Not enough jobs with livable wages |

The current process did not identify any common need from 2018.

## Hospital and Community Projects and Programs Implemented to Address Needs Identified in 2018

In response to the needs identified in the 2018 CHNA process, the following actions were taken:

The Community Health Partnership meets at CVHD in Jamestown on the third Thursday of every month at noon. The group convenes to discuss emerging issues as well as assessing the progress on an annual basis for the community health improvement plan.

*Obesity and Physical Activity:* Ongoing activities include conducting Community Health Partnership monthly meetings to assess and monitor progress (led by CVHD), North Dakota State University (NDSU) Healthy Eating Programs (led by NDSU Extension), and Jamestown Public Schools (JPS) Summer Breakfast (led by NDSU Extension and JPS) to change eating behaviors; increasing opportunities to walk safely in the community (lad by Community Partners) for culture and behavior changes; and offering community-based physical activity sessions for various ages (i.e. bone builders) (led by Community Partners) for behavior changes. In 2018-2019, they developed the Community Bike Fleet Plan (conducted by Community Health Partnership) to establish Bike Fleet. In 2018-2021, they developed a sustainability plan for TRAC scholarships (lead by Two Rivers Activity Center) to establish a sustainability plan.

*Substance Abuse:* They had a goal to eliminate exposure to secondhand smoke in Stutsman County. Their target date was June 2019 to increase the number of tobacco-free public recreation areas. The effort was led by CVHD and polices were passed (reported to the North Dakota Department of Health). They also wanted to prevent initiation of tobacco use by youth and young adults in Stutsman County. Their target date was June 2020 to educate and advocate with Stutsman County schools that did not have a comprehensive tobacco policy in place and have them adopt one. The effort was led by CVHD with passes polices (reported to the North Dakota Department of Health).

*Reduce underage drinking in Stutsman County:* In August 2020, the county reduced the perceived "snitching" barrier among community members by implementing a new texting tipline, including three keywords that direct tips to specific areas of the community (school, police department, and sheriff). This effort was led by CVHD, Jamestown Public School, the Jamestown Police Department, and the Stutsman County Sheriff's Department. Efforts were also made to decrease inconsistency of ID checking practices at on- and off-sale establishments in Stutsman County to decrease failed compliance checks (led by CVHD and the Jamestown Police Department).

The implementation plan just described for JRMC is posted on the JRMC website at https://jrmcnd.com/wp-content/uploads/DataBookandPlan-2018Final.pdf#page=33.


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# Next Steps – Strategic Implementation Plan

Although a CHNA and strategic implementation plan are required by hospitals and local public health units considering accreditation, it is important to keep in mind the needs identified, at this point, will be broad, community-wide needs along with healthcare system-specific needs. This process is simply a first step to identify needs and determine areas of priority. The second step will be to convene the steering committee, or other community group, to select an agreed upon prioritized need on which to begin working. The strategic planning process will begin with identifying current initiatives, programs, and resources already in place to address the identified community need(s). Additional steps include identifying what is needed and feasible to address (taking community resources into consideration) and what role and responsibility the hospital, clinic, and various community organizations play in developing strategies and implementing specific activities to address the community health need selected. Community engagement is essential for successfully developing a plan and executing the action steps for addressing one or more of the needs identified.

*"If you want to go fast, go alone. If you want to go far, go together." Proverb*

## Community Benefit Report

While not required, CRH strongly encourages a review of the most recent Community Benefit Report to determine how/if it aligns with the needs identified through the CHNA as well as the implementation plan.

The community benefit requirement is a long-standing requirement of nonprofit hospitals and is reported in Part I of the hospital's Form 990. The strategic implementation requirement was added as part of the Affordable Care Act's CHNA requirement. It is reported on Part V of the 990. Not-for-profit healthcare organizations demonstrate their commitment to community service through organized and sustainable community benefit programs providing:

- Free and discounted care to those unable to afford healthcare.
- Care to low-income beneficiaries of Medicaid and other indigent care programs.
- Services designed to improve community health and increase access to healthcare.

Community benefit is also the basis of the tax exemption of not-for-profit hospitals. The Internal Revenue Service (IRS), in its Revenue Ruling 69–545, describes the community benefit standard for charitable tax-exempt hospitals. Since 2008, tax-exempt hospitals have been required to report their community benefit and other information related to tax exemption on IRS Form 990 Schedule H.

## What Are Community Benefits?

Community benefits are programs or activities that provide treatment and/or promote health and healing as a response to identified community needs. They increase access to healthcare and improve community health.

A community benefit must respond to an identified community need and meet at least one of the following criteria:

- Improve access to healthcare services.
- Enhance health of the community.
- Advance medical or health knowledge.
- Relieve or reduce the burden of government or other community efforts.

A program or activity should not be reported as community benefit if it is:

- Provided for marketing purposes.
- Restricted to hospital employees and physicians.
- Required of all healthcare providers by rules or standards.
- Questionable as to whether it should be reported.
- Unrelated to health or the mission of the organization.


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## Critical Access Hospital Profile

## Spotlight on: Jamestown, North Dakota

# Jamestown Regional Medical Center

### Quick Facts

**Administrator/CEO:**
Mike Delfs

**Chief of Medical Staff:**
James Torrance, MD

**Board Chair:** Wanda Vining Alber

**City Population:**
15,289 (2019 estimate)[1]

**County Population:**
21,000 (2019 estimate)[1]

**County Median Household Income:**
57,674 (2019 estimate)[1]

**County Median Age:**
40.5 (2019 estimate)[1]

**Service Area Population:**
35 for specialty,
20 for primary care

**Owned by:** Nonprofit corporation

**Hospital Beds:** 25

**Trauma Level:** IV

**Critical Access Hospital Designation:** 2009

Economic Impact on the County[2]

**Employment Impact:**
Direct – 282
Secondary – 182
Total – 464

**Financial Impact:**
Direct – $24.8 million
Secondary – $9.23 million
Total – $34 million

## Mission

Our mission is to compassionately revolutionize healthcare in the heartland.

## Vision Statement

To be the best rural hospital in the United States.

**County:** Stutsman
**Address:** 2422 20th St. SW
Jamestown, ND 58401
**Phone:** (701) 952-1050
**Fax:** (701) 952-3267
**Web:** www.jrmcnd.com

Jamestown Regional Medical Center was opened in 1935 by community leaders dedicated to provide the finest possible care to Stutsman county and the surrounding region. In 2008 the board of directors decided to build a new hospital that would provide the same compassionate care as Jamestown Regional Medical Center combined with the latest technology and efficiencies. Jamestown Regional Medical Center opened on July 31, 2011. JRMC is a nationally recognized, Thompson Reuters TOP 100 HOSPITAL, fully equipped and professionally staffed, 25-bed, Critical Access Hospital. JRMC serves as the hub for a group of dedicated resident and visiting physicians.

## Services

Jamestown Regional Medical Center directly provides the following services:

- Audiology
- Cancer Care
- Cardiac Rehab/Pumonary
- Emergency Room
- ENT
- Family BirthPlace
- Gynecology
- Home Health Services
- Hospice Care
- Laboratory Services
- Lifeline
- 3D Mammography
- MRI
- Nutritional Services
- Occupational Therapy
- Orthopedics
- Physical Therapy
- Podiatry
- Radiology
- Respiratory Care
- Social Services
- Speech Therapy
- Sports Medicine
- Surgery Center
- Urology
- Volunteer
- Wound Center - Hyperbaric Chamber


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## Staffing

**Physicians:** ..... 9
**RNs:** ..... 76
**LPNs:** .....11
**Ancillary Personnel:** ..... 43
**Total Employees:** ..... 315

## Local Sponsors and Grant Funding Sources

- USDA loan for new hospital
- SHIP Grant (Small Rural Hospital Improvement Program)

## Sources


1 - US Census Bureau; American Factfinder; Community Facts

2 - Economic Impact 2020 Center for Rural Health Oklahoma State University and Center for Rural Health University of North Dakota


Center for Rural Health
University of North Dakota
School of Medicine & Health Sciences


This project is supported by the Medicare Rural Hospital Flexibility Grant Program and the State Office of Rural Health Grant Program at the Center for Rural Health, University of North Dakota School of Medicine & Health Sciences located in Grand Forks, North Dakota.

ruralhealth.und.edu


## Jamestown Regional Medical Center

Reverend W.W.A. Keller, Lutheran Pastor, and the first board of directors sold bonds as the Lutheran Charities Association of Central North Dakota. Gilbert Horton was hired as the design architect. Ground was broken on October 1, 1928.

On Wednesday, October 30, 1929, the cornerstore for the new hospital was laid in place. This was one day after a dramatic drop on Wall Street. Construction was slowed to allow for further fund raising.

Due to the perseverance of Reverend Keller and his board of trustees, some of whom are listed here, Reverend Joseph Johnson, Mr. A. Johnson, Mr. F. G. Koehn, Mr. J.G. Bunge, Reverend Ernst, Mr. E. Frey, Mr. A Foesch,Mr. Ben Gilbertson and Mr. F Koehn, the north wing of the main building opened six years later on September 25, 1935.

## Today

Jamestown Regional Medical Center opened on July 31, 2011 with the transfer of eight patients. The campus is on 50 acres just south of I-94 at exit 256. A helipad sits between the hospital and freeway offering quick transfer to Trauma 1 and 2 hospitals.

## Recreation

Located in the valley where the James and Pipestem Rivers meet, Jamestown offers a variety of recreational opportunities: from summer activities such as fishing, hunting, and golfing to winter activities such as ice fishing, snowmobiling, and cross country skiing.

Jamestown is also home to The World's Largest Buffalo and the National Buffalo Museum. Jamestown offers something for everyone!

Known as the "Pride of the Prairie," Jamestown extends friendly hospitality to all visitors. Whether touring the Frontier Village and viewing our live herd of buffalo, visiting our historical sites, or joining us for a tournament at one of our sporting complexes, we are sure you will enjoy Jamestown. A year-round vacation area, Jamestown also offers a variety of entertainment, excellent motel accommodations, and fine dining to make your visit an unforgettable experience.



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# Appendix B – Economic Impact Analysis

December 2020

# Jamestown Regional Medical Center

*Healthcare, especially a hospital, plays a vital role in local economies.*

## Economic Impact

Jamestown Regional Medical Center is composed of a Critical Access Hospital (CAH), a specialty clinic, home health, and hospice in Jamestown, North Dakota.

Jamestown Regional Medical Center **directly** employs **282 FTE employees** with an annual payroll of over **$24.8 million** (including benefits).

- After application of the employment multiplier of 1.65, these employees created an additional **182** jobs.
- The same methodology is applied to derive the income impact. The income multiplier of 1.37 is applied to create nearly **$9.23 million** in income as they interact with other sectors of the local economy.
- **Total impacts = 464 jobs and more than $34 million in income**.

## Healthcare and Your Local Economy

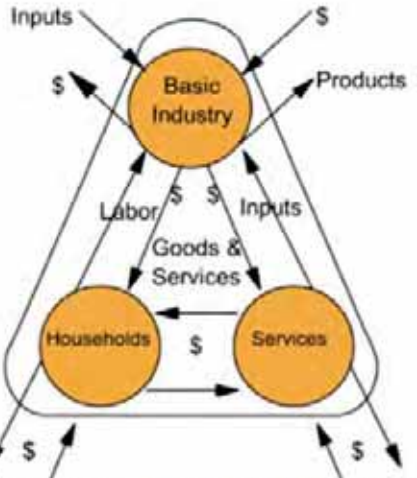
The health sector in a rural community, anchored by a CAH, is responsible for a number of full- and part-time jobs and the resulting wages, salaries, and benefits. Research findings from the National Center for Rural Health Works indicate that rural hospitals typically are one of the top employers in the rural community. The employment and the resulting wages, salaries, and benefits from a CAH are critical to the rural community economy. Figure 1 depicts the interaction between an industry like a healthcare institution and the community, containing other industries and households.

## Key contributions of the health system include

- Attracts retirees and families
- Appeals to businesses looking to establish and/or relocate
- High quality healthcare services and infrastructure foster community development
- Positive impact on retail sales of local economy
- Provides higher-skilled and higher-wage employment
- Increases the local tax base used by local government

Data analysis was completed by the Center for Rural Health at the Oklahoma State University Center for Health Sciences utilizing IMPLAN data.

**Figure 1. An overview of the community economic system.**




Source: Doeksen, G.A., T. Johnson, and C. Willoughby. 1997. Measuring the Economic Importance of the Health Sector on a Local Economy: A Brief Literature Review and Procedures to Measure Local Impacts

*Fact Sheet Author: Kylie Nissen, BBA*

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# Appendix C – CHNA Survey Instrument

Center for Rural Health
University of North Dakota
School of Medicine & Health Sciences

Jamestown
REGIONAL MEDICAL CENTER

Public Health
Prevent. Promote. Protect.
Central Valley Health District

**Stutsman County Health Survey**

Jamestown Regional Medical Center and Central Valley Health District are interested in hearing from you about community health concerns.

The focus of this effort is to:

- Learn of the good things in your community as well as concerns in the community
- Understand perceptions and attitudes about the health of the community, and hear suggestions for improvement
- Learn more about how local health services are used by you and other residents

If you prefer, you may take the survey online at
http://tinyurl.com/Jamestown21
or by scanning on the QR Code at the right.

Scan here to take the survey online!

Surveys will be tabulated by the Center for Rural Health at the University of North Dakota School of Medicine and Health Sciences. Your responses are anonymous, and you may skip any question you do not want to answer. Your answers will be combined with other responses and reported only in total. If you have questions about the survey, you may contact Kylie Nissen at 701.777.5380.

***Surveys will be accepted through March 1, 2021. Your opinion matters – thank you in advance!***

**Community Assets:** Please tell us about your community by **choosing up to three options** you most agree with in each category below.

1. Considering the **PEOPLE** in your community, the best things are (choose up to THREE):

- ☐ Community is socially and culturally diverse or becoming more diverse
- ☐ Feeling connected to people who live here
- ☐ Government is accessible
- ☐ People are friendly, helpful, supportive
- ☐ People who live here are involved in their community
- ☐ People are tolerant, inclusive, and open-minded
- ☐ Sense that you can make a difference through civic engagement
- ☐ Other (please specify): _____

2. Considering the **SERVICES AND RESOURCES** in your community, the best things are (choose up to THREE):

- ☐ Access to healthy food
- ☐ Active faith community
- ☐ Business district (restaurants, availability of goods)
- ☐ Community groups and organizations
- ☐ Healthcare
- ☐ Opportunities for advanced education
- ☐ Public transportation
- ☐ Programs for youth
- ☐ Quality school systems
- ☐ Other (please specify): _____

3. Considering the **QUALITY OF LIFE** in your community, the best things are (choose up to THREE):

- ☐ Closeness to work and activities
- ☐ Family-friendly; good place to raise kids
- ☐ Informal, simple, laidback lifestyle
- ☐ Job opportunities or economic opportunities
- ☐ Safe place to live, little/no crime
- ☐ Other (please specify): _____

4. Considering the **ACTIVITIES** in your community, the best things are (choose up to THREE):

- ☐ Activities for families and youth
- ☐ Arts and cultural activities
- ☐ Local events and festivals
- ☐ Recreational and sports activities
- ☐ Year-round access to fitness opportunities
- ☐ Other (please specify): _____


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**Community Concerns:** Please tell us about your community by choosing up to three options you most agree with in each category.

5. Considering the **COMMUNITY /ENVIRONMENTAL HEALTH** in your community, concerns are (choose up to THREE):

- ☐ Active faith community
- ☐ Attracting and retaining young families
- ☐ Not enough jobs with livable wages, not enough to live on
- ☐ Not enough affordable housing
- ☐ Poverty
- ☐ Changes in population size (increasing or decreasing)
- ☐ Crime and safety, adequate law enforcement personnel
- ☐ Water quality (well water, lakes, streams, rivers)
- ☐ Air quality
- ☐ Litter (amount of litter, adequate garbage collection)
- ☐ Having enough child daycare services
- ☐ Having enough quality school resources
- ☐ Not enough places for exercise and wellness activities
- ☐ Not enough public transportation options, cost of public transportation
- ☐ Racism, prejudice, hate, discrimination
- ☐ Traffic safety, including speeding, road safety, seatbelt use, and drunk/distracted driving
- ☐ Physical violence, domestic violence, sexual abuse
- ☐ Child abuse
- ☐ Bullying/cyber-bullying
- ☐ Recycling
- ☐ Homelessness
- ☐ Other (please specify): _____

6. Considering the **AVAILABILITY/DELIVERY OF HEALTH SERVICES** in your community, concerns are (choose up to THREE):

- ☐ Ability to get appointments for health services within 48 hours.
- ☐ Extra hours for appointments, such as evenings and weekends
- ☐ Availability of primary care providers (MD,DO,NP,PA) and nurses
- ☐ Ability to retain primary care providers (MD,DO,NP,PA) and nurses in the community
- ☐ Availability of public health professionals
- ☐ Availability of specialists
- ☐ Not enough healthcare staff in general
- ☐ Availability of wellness and disease prevention services
- ☐ Availability of mental health services
- ☐ Availability of substance use disorder treatment services
- ☐ Availability of hospice
- ☐ Availability of dental care
- ☐ Availability of vision care
- ☐ Emergency services (ambulance & 911) available 24/7
- ☐ Ability/willingness of healthcare providers to work together to coordinate patient care within the health system.
- ☐ Ability/willingness of healthcare providers to work together to coordinate patient care outside the local community.
- ☐ Patient confidentiality (inappropriate sharing of personal health information)
- ☐ Not comfortable seeking care where I know the employees at the facility on a personal level
- ☐ Quality of care
- ☐ Cost of healthcare services
- ☐ Cost of prescription drugs
- ☐ Cost of health insurance
- ☐ Adequacy of health insurance (concerns about out-of-pocket costs)
- ☐ Understand where and how to get health insurance
- ☐ Adequacy of Indian Health Service or Tribal Health Services
- ☐ Other (please specify): _____


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7. Considering the **YOUTH POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Smoking and tobacco use, exposure to second-hand smoke or vaping (juuling)
- ☐ Cancer
- ☐ Diabetes
- ☐ Depression/anxiety
- ☐ Stress
- ☐ Suicide
- ☐ Not enough activities for children and youth
- ☐ Teen pregnancy
- ☐ Sexual health
- ☐ Diseases that can spread, such as sexually transmitted diseases or AIDS
- ☐ Wellness and disease prevention, including vaccine-preventable diseases
- ☐ Not getting enough exercise/physical activity
- ☐ Obesity/overweight
- ☐ Hunger, poor nutrition
- ☐ Crime
- ☐ Graduating from high school
- ☐ Availability of disability services
- ☐ Other (please specify): _____

8. Considering the **ADULT POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Smoking and tobacco use, exposure to second-hand smoke or vaping (juuling)
- ☐ Cancer
- ☐ Lung disease (i.e. emphysema, COPD, asthma)
- ☐ Diabetes
- ☐ Heart disease
- ☐ Hypertension
- ☐ Dementia/Alzheimer's disease
- ☐ Other chronic diseases: _____
- ☐ Depression/anxiety
- ☐ Stress
- ☐ Suicide
- ☐ Diseases that can spread, such as sexually transmitted diseases or AIDS
- ☐ Wellness and disease prevention, including vaccine-preventable diseases
- ☐ Not getting enough exercise/physical activity
- ☐ Obesity/overweight
- ☐ Hunger, poor nutrition
- ☐ Availability of disability services
- ☐ Other (please specify): _____

9. Considering the **SENIOR POPULATION** in your community, concerns are (choose up to THREE):

- ☐ Ability to meet needs of older population
- ☐ Long-term/nursing home care options
- ☐ Assisted living options
- ☐ Availability of resources to help the elderly stay in their homes
- ☐ Cost of activities for seniors
- ☐ Availability of activities for seniors
- ☐ Availability of resources for family and friends caring for elders
- ☐ Quality of elderly care
- ☐ Cost of long-term/nursing home care
- ☐ Availability of transportation for seniors
- ☐ Availability of home health
- ☐ Not getting enough exercise/physical activity
- ☐ Depression/anxiety
- ☐ Suicide
- ☐ Alcohol use and abuse
- ☐ Drug use and abuse (including prescription drug abuse)
- ☐ Elder abuse
- ☐ Other (please specify): _____

10. What single issue do you feel is the biggest challenge facing your community?

_____

_____


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## Delivery of Healthcare

11. Where do you find out about **LOCAL HEALTH SERVICES** available in your area? (Choose ALL that apply)

- ☐ Advertising
- ☐ Employer/worksite wellness
- ☐ Healthcare professionals
- ☐ Indian Health Service
- ☐ Newspaper
- ☐ Public health professionals
- ☐ Radio
- ☐ Social Media (Facebook, Twitter, etc.)
- ☐ Tribal Health
- ☐ Web searches
- ☐ Word of mouth (friends, neighbors, co-workers, etc.)
- ☐ Other (please specify): _____

12. What **PREVENTS** community residents from receiving healthcare? (Choose ALL that apply)

- ☐ Can't get transportation services
- ☐ Concerns about confidentiality
- ☐ Distance from health facility
- ☐ Don't know about local services
- ☐ Don't speak language or understand culture
- ☐ Lack of disability access
- ☐ Lack of services through Indian Health Services
- ☐ Limited access to telehealth technology (patients seen by providers at another facility through a monitor/TV screen)
- ☐ No insurance or limited insurance
- ☐ Not able to get appointment/limited hours
- ☐ Not able to see same provider over time
- ☐ Not accepting new patients
- ☐ Not affordable
- ☐ Not enough providers (MD, DO, NP, PA)
- ☐ Not enough evening or weekend hours
- ☐ Not enough specialists
- ☐ Poor quality of care
- ☐ Other (please specify): _____

13. Where do you turn for trusted health information? (Choose ALL that apply)

- ☐ Other healthcare professionals (nurses, chiropractors, dentists, etc.)
- ☐ Primary care provider (doctor, nurse practitioner, physician assistant)
- ☐ Public health professional
- ☐ Web searches/internet (WebMD, Mayo Clinic, Healthline, etc.)
- ☐ Word of mouth, from others (friends, neighbors, co-workers, etc.)
- ☐ Other (please specify): _____

14. What specific healthcare services, if any, do you think should be added locally?

_____

_____

## Demographic Information: Please tell us about yourself.

14. Do you work for the hospital, clinic, or public health unit?

- ☐ Yes
- ☐ No

15. How did you acquire the survey (or survey link) that you are completing?

- ☐ Hospital or public health website
- ☐ Hospital or public health social media page
- ☐ Hospital or public health employee
- ☐ Hospital or public health facility
- ☐ Economic development website or social media
- ☐ Other website or social media page (please specify): _____
- ☐ Newspaper advertisement
- ☐ Newsletter (if so, what one):_____
- ☐ Church bulletin
- ☐ Flyer sent home from school
- ☐ Flyer at local business
- ☐ Flyer in the mail
- ☐ Word of Mouth
- ☐ Direct email (if so, from what organization):_____
- ☐ Other (please specify): _____


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16. Health insurance or health coverage status (choose ALL that apply):

- ☐ Indian Health Service (IHS)
- ☐ Insurance through employer (self, spouse, or parent)
- ☐ Self-purchased insurance
- ☐ Medicaid
- ☐ Medicare
- ☐ No insurance
- ☐ Veteran's Healthcare Benefits
- ☐ Other (please specify): _____

17. Age:

- ☐ Less than 18 years
- ☐ 18 to 24 years
- ☐ 25 to 34 years
- ☐ 35 to 44 years
- ☐ 45 to 54 years
- ☐ 55 to 64 years
- ☐ 65 to 74 years
- ☐ 75 years and older

18. Highest level of education:

- ☐ Less than high school
- ☐ High school diploma or GED
- ☐ Some college/technical degree
- ☐ Associate's degree
- ☐ Bachelor's degree
- ☐ Graduate or professional degree

19. Sex:

- ☐ Female
- ☐ Male
- ☐ Non-binary
- ☐ Other (please specify): _____

20. Employment status:

- ☐ Full time
- ☐ Part time
- ☐ Homemaker
- ☐ Multiple job holder
- ☐ Unemployed
- ☐ Retired

21. Your zip code: _____

22. Race/Ethnicity (choose ALL that apply):

- ☐ American Indian
- ☐ African American
- ☐ Asian
- ☐ Hispanic/Latino
- ☐ Pacific Islander
- ☐ White/Caucasian
- ☐ Other: _____

23. Annual household income before taxes:

- ☐ Less than $15,000
- ☐ $15,000 to $24,999
- ☐ $25,000 to $49,999
- ☐ $50,000 to $74,999
- ☐ $75,000 to $99,999
- ☐ $100,000 to $149,999
- ☐ $150,000 and over

24. Overall, please share concerns and suggestions to improve the delivery of local healthcare.

_____

_____


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# Appendix D – County Health Rankings Explained

Source: http://www.countyhealthrankings.org/

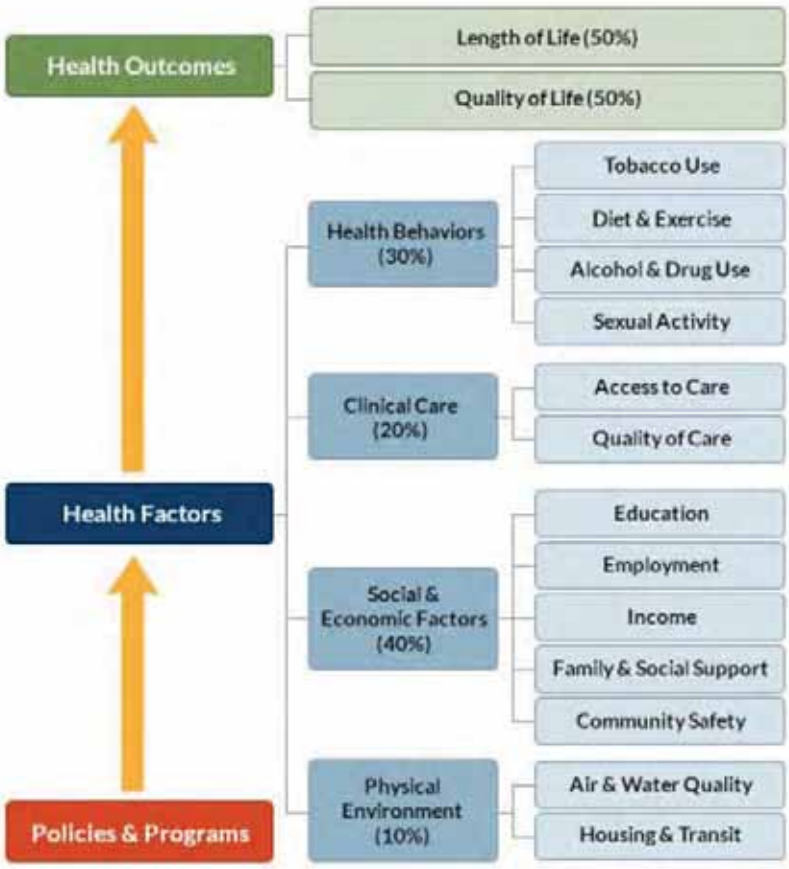
## Methods

The County Health Rankings, a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute, measure the health of nearly all counties in the nation and rank them within states. The Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-informed weights.

## What is Ranked

The County Health Rankings are based on counties and county equivalents (ranked places). Any entity that has its own Federal Information Processing Standard (FIPS) county code is included in the Rankings. We only rank counties and county equivalents within a state. The major goal of the Rankings is to raise awareness about the many factors that influence health and that health varies from place to place, not to produce a list of the healthiest 10 or 20 counties in the nation and only focus on that.

## Ranking System





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The County Health Rankings model (shown above) provides the foundation for the entire ranking process.

Counties in each of the 50 states are ranked according to summaries of a variety of health measures. Those having high ranks, e.g. 1 or 2, are considered to be the "healthiest." Counties are ranked relative to the health of other counties in the same state. We calculate and rank eight summary composite scores:

1. **Overall Health Outcomes**
2. Health Outcomes – **Length of life**
3. Health Outcomes – **Quality of life**
4. **Overall Health Factors**
5. Health Factors – **Health behaviors**
6. Health Factors – **Clinical care**
7. Health Factors – **Social and economic factors**
8. Health Factors – **Physical environment**

## Data Sources and Measures

The County Health Rankings team synthesizes health information from a variety of national data sources to create the Rankings. Most of the data used are public data available at no charge. Measures based on vital statistics, sexually transmitted infections, and Behavioral Risk Factor Surveillance System (BRFSS) survey data were calculated by staff at the National Center for Health Statistics and other units of the Centers for Disease Control and Prevention (CDC). Measures of healthcare quality were calculated by staff at The Dartmouth Institute.

## Data Quality

The County Health Rankings team draws upon the most reliable and valid measures available to compile the Rankings. Where possible, margins of error (95% confidence intervals) are provided for measure values. In many cases, the values of specific measures in different counties are not statistically different from one another; however, when combined using this model, those various measures produce the different rankings.

## Calculating Scores and Ranks

The County Health Rankings are compiled from many different types of data. To calculate the ranks, they first standardize each of the measures. The ranks are then calculated based on weighted sums of the standardized measures within each state. The county with the lowest score (best health) gets a rank of #1 for that state and the county with the highest score (worst health) is assigned a rank corresponding to the number of places we rank in that state.


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# Health Outcomes and Factors

Source: http://www.countyhealthrankings.org/explore-health-rankings/what-and-why-we-rank

## Health Outcomes

### Premature Death (YPLL)

Premature death is the years of potential life lost before age 75 (YPLL-75). Every death occurring before the age of 75 contributes to the total number of years of potential life lost. For example, a person dying at age 25 contributes 50 years of life lost, whereas a person who dies at age 65 contributes 10 years of life lost to a county's YPLL. The YPLL measure is presented as a rate per 100,000 population and is age-adjusted to the 2000 US population.

*Reason for Ranking*

Measuring premature mortality, rather than overall mortality, reflects the County Health Rankings' intent to focus attention on deaths that could have been prevented. Measuring YPLL allows communities to target resources to high-risk areas and further investigate the causes of premature death.

### Poor or Fair Health

Self-reported health status is a general measure of health-related quality of life (HRQoL) in a population. This measure is based on survey responses to the question: "In general, would you say that your health is excellent, very good, good, fair, or poor?" The value reported in the County Health Rankings is the percentage of adult respondents who rate their health "fair" or "poor." The measure is modeled and age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

*Reason for Ranking*

Measuring HRQoL helps characterize the burden of disabilities and chronic diseases in a population. Self-reported health status is a widely used measure of people's health-related quality of life. In addition to measuring how long people live, it is important to also include measures that consider how healthy people are while alive.

### Poor Physical Health Days

Poor physical health days is based on survey responses to the question: "Thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their physical health was not good. The measure is age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.

*Reason for Ranking*

Measuring health-related quality of life (HRQoL) helps characterize the burden of disabilities and chronic diseases in a population. In addition to measuring how long people live, it is also important to include measures of how healthy people are while alive – and people's reports of days when their physical health was not good are a reliable estimate of their recent health.

### Poor Mental Health Days

Poor mental health days is based on survey responses to the question: "Thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" The value reported in the County Health Rankings is the average number of days a county's adult respondents report that their mental health was not good. The measure is age-adjusted to the 2000 US population. Please note that the methods for calculating this measure changed in the 2016 Rankings.


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*Reason for Ranking*
Overall health depends on both physical and mental well-being. Measuring the number of days when people report that their mental health was not good, i.e., poor mental health days, represents an important facet of health-related quality of life.

### Low Birth Weight
Birth outcomes are a category of measures that describe health at birth. These outcomes, such as low birthweight (LBW), represent a child's current and future morbidity — or whether a child has a "healthy start" — and serve as a health outcome related to maternal health risk.

*Reason for Ranking*
LBW is unique as a health outcome because it represents multiple factors: infant current and future morbidity, as well as premature mortality risk, and maternal exposure to health risks. The health associations and impacts of LBW are numerous.

In terms of the infant's health outcomes, LBW serves as a predictor of premature mortality and/or morbidity over the life course.[1] LBW children have greater developmental and growth problems, are at higher risk of cardiovascular disease later in life, and have a greater rate of respiratory conditions.[2-4]

From the perspective of maternal health outcomes, LBW indicates maternal exposure to health risks in all categories of health factors, including her health behaviors, access to healthcare, the social and economic environment the mother inhabits, and environmental risks to which she is exposed. Authors have found that modifiable maternal health behaviors, including nutrition and weight gain, smoking, and alcohol and substance use or abuse can result in LBW.[5]

LBW has also been associated with cognitive development problems. Several studies show that LBW children have higher rates of sensorineural impairments, such as cerebral palsy, and visual, auditory, and intellectual impairments.[2,3,6] As a consequence, LBW can "impose a substantial burden on special education and social services, on families and caretakers of the infants, and on society generally."[7]

## Health Factors

### Adult Smoking
Adult smoking is the percentage of the adult population that currently smokes every day or most days and has smoked at least 100 cigarettes in their lifetime. Please note that the methods for calculating this measure changed in the 2016 Rankings.

*Reason for Ranking*
Each year approximately 443,000 premature deaths can be attributed to smoking. Cigarette smoking is identified as a cause of various cancers, cardiovascular disease, and respiratory conditions, as well as low birthweight and other adverse health outcomes. Measuring the prevalence of tobacco use in the population can alert communities to potential adverse health outcomes and can be valuable for assessing the need for cessation programs or the effectiveness of existing programs.

### Adult Obesity
Adult obesity is the percentage of the adult population (age 20 and older) that reports a body mass index (BMI) greater than or equal to 30 kg/m2.

*Reason for Ranking*
Obesity is often the result of an overall energy imbalance due to poor diet and limited physical activity. Obesity increases the risk for health conditions such as coronary heart disease, type 2 diabetes, cancer, hypertension, dyslipidemia, stroke, liver and gallbladder disease, sleep apnea and respiratory problems, osteoarthritis, and poor health status.[1,2]


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## Food Environment Index

The food environment index ranges from 0 (worst) to 10 (best) and equally weights two indicators of the food environment:

1) Limited access to healthy foods estimates the percentage of the population that is low income and does not live close to a grocery store. Living close to a grocery store is defined differently in rural and nonrural areas; in rural areas, it means living less than 10 miles from a grocery store whereas in nonrural areas, it means less than 1 mile. "Low income" is defined as having an annual family income of less than or equal to 200 percent of the federal poverty threshold for the family size.

2) Food insecurity estimates the percentage of the population who did not have access to a reliable source of food during the past year. A two-stage fixed effects model was created using information from the Community Population Survey, Bureau of Labor Statistics, and American Community Survey.

More information on each of these can be found among the additional measures.

### *Reason for Ranking*

There are many facets to a healthy food environment, such as the cost, distance, and availability of healthy food options. This measure includes access to healthy foods by considering the distance an individual lives from a grocery store or supermarket; there is strong evidence that food deserts are correlated with high prevalence of overweight, obesity, and premature death.[1-3] Supermarkets traditionally provide healthier options than convenience stores or smaller grocery stores.[4]

Additionally, access in regards to a constant source of healthy food due to low income can be another barrier to healthy food access. Food insecurity, the other food environment measure included in the index, attempts to capture the access issue by understanding the barrier of cost. Lacking constant access to food is related to negative health outcomes such as weight-gain and premature mortality.[5,6] In addition to asking about having a constant food supply in the past year, the module also addresses the ability of individuals and families to provide balanced meals further addressing barriers to healthy eating. It is important to have adequate access to a constant food supply, but it may be equally important to have nutritious food available.

## Physical Inactivity

Physical inactivity is the percentage of adults age 20 and over reporting no leisure-time physical activity. Examples of physical activities provided include running, calisthenics, golf, gardening, or walking for exercise.

### *Reason for Ranking*

Decreased physical activity has been related to several disease conditions such as type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. Inactivity causes 11% of premature mortality in the United States, and caused more than 5.3 million of the 57 million deaths that occurred worldwide in 2008.[1] In addition, physical inactivity at the county level is related to healthcare expenditures for circulatory system diseases.[2]

## Access to Exercise Opportunities

Change in measure calculation in 2018: Access to exercise opportunities measures the percentage of individuals in a county who live reasonably close to a location for physical activity. Locations for physical activity are defined as parks or recreational facilities. Parks include local, state, and national parks. Recreational facilities include YMCAs as well as businesses identified by the following Standard Industry Classification (SIC) codes and include a wide variety of facilities including gyms, community centers, dance studios and pools: 799101, 799102, 799103, 799106, 799107, 799108, 799109, 799110, 799111, 799112, 799201, 799701, 799702, 799703, 799704, 799707, 799711, 799717, 799723, 799901, 799908, 799958, 799969, 799971, 799984, or 799998.

Individuals who:

- reside in a census block within a half mile of a park or
- in urban census blocks: reside within one mile of a recreational facility or


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- in rural census blocks: reside within three miles of a recreational facility
- are considered to have adequate access for opportunities for physical activity.

*Reason for Ranking*

Increased physical activity is associated with lower risks of type 2 diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality, independent of obesity. The role of the built environment is important for encouraging physical activity. Individuals who live closer to sidewalks, parks, and gyms are more likely to exercise.[1-3]

### Excessive Drinking

Excessive drinking is the percentage of adults that report either binge drinking, defined as consuming more than 4 (women) or 5 (men) alcoholic beverages on a single occasion in the past 30 days, or heavy drinking, defined as drinking more than one (women) or 2 (men) drinks per day on average. Please note that the methods for calculating this measure changed in the 2011 Rankings and again in the 2016 Rankings.

*Reason for Ranking*

Excessive drinking is a risk factor for a number of adverse health outcomes, such as alcohol poisoning, hypertension, acute myocardial infarction, sexually transmitted infections, unintended pregnancy, fetal alcohol syndrome, sudden infant death syndrome, suicide, interpersonal violence, and motor vehicle crashes. [1] Approximately 80,000 deaths are attributed annually to excessive drinking. Excessive drinking is the third leading lifestyle-related cause of death in the United States.[2]

### Alcohol-Impaired Driving Deaths

Alcohol-impaired driving deaths is the percentage of motor vehicle crash deaths with alcohol involvement.

*Reason for Ranking*

Approximately 17,000 Americans are killed annually in alcohol-related motor vehicle crashes. Binge / heavy drinkers account for most episodes of alcohol-impaired driving.[1,2]

### Sexually Transmitted Infection Rate

Sexually transmitted infections (STI) are measured as the chlamydia incidence (number of new cases reported) per 100,000 population.

*Reason for Ranking*

Chlamydia is the most common bacterial STI in North America and is one of the major causes of tubal infertility, ectopic pregnancy, pelvic inflammatory disease, and chronic pelvic pain.[1,2] STIs are associated with a significantly increased risk of morbidity and mortality, including increased risk of cervical cancer, infertility, and premature death.[3] STIs also have a high economic burden on society. The direct medical costs of managing sexually transmitted infections and their complications in the US, for example, was approximately 15.6 billion dollars in 2008.[4]

### Teen Births

Teen births are the number of births per 1,000 female population, ages 15-19.

*Reason for Ranking*

Evidence suggests teen pregnancy significantly increases the risk of repeat pregnancy and of contracting a sexually transmitted infection (STI), both of which can result in adverse health outcomes for mothers, children, families, and communities. A systematic review of the sexual risk among pregnant and mothering teens concludes that pregnancy is a marker for current and future sexual risk behavior and adverse outcomes [1]. Pregnant teens are more likely than older women to receive late or no prenatal care, have eclampsia, puerperal endometritis, systemic infections, low birthweight, preterm delivery, and severe neonatal conditions [2, 3]. Pre-term delivery and low birthweight babies have increased risk of child developmental delay, illness, and mortality [4]. Additionally, there are strong ties between teen birth and poor socioeconomic, behavioral, and mental outcomes. Teenage women who bear a child are much less likely to achieve an education level at or


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beyond high school, much more likely to be overweight/obese in adulthood, and more likely to experience depression and psychological distress [5-7].

## Uninsured

Uninsured is the percentage of the population under age 65 that has no health insurance coverage. The Small Area Health Insurance Estimates uses the American Community Survey (ACS) definition of insured: Is this person CURRENTLY covered by any of the following types of health insurance or health coverage plans: Insurance through a current or former employer or union, insurance purchased directly from an insurance company, Medicare, Medicaid, Medical Assistance, or any kind of government-assistance plan for those with low incomes or a disability, TRICARE or other military healthcare, Indian Health Services, VA or any other type of health insurance or health coverage plan? Please note that the methods for calculating this measure changed in the 2012 Rankings.

### *Reason for Ranking*

Lack of health insurance coverage is a significant barrier to accessing needed healthcare and to maintaining financial security.

The Kaiser Family Foundation released a report in December 2017 that outlines the effects insurance has on access to healthcare and financial independence. One key finding was that "Going without coverage can have serious health consequences for the uninsured because they receive less preventative care, and delayed care often results in serious illness or other health problems. Being uninsured can also have serious financial consequences, with many unable to pay their medical bills, resulting in medical debt."[1]

## Primary Care Physicians

Primary care physicians is the ratio of the population to total primary care physicians. Primary care physicians include non-federal, practicing physicians (M.D.'s and D.O.'s) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics. Please note this measure was modified in the 2011 Rankings and again in the 2013 Rankings.

### *Reason for Ranking*

Access to care requires not only financial coverage, but also access to providers. While high rates of specialist physicians have been shown to be associated with higher (and perhaps unnecessary) utilization, sufficient availability of primary care physicians is essential for preventive and primary care, and, when needed, referrals to appropriate specialty care.[1,2]

## Dentists

Dentists are measured as the ratio of the county population to total dentists in the county.

### *Reason for Ranking*

Untreated dental disease can lead to serious health effects including pain, infection, and tooth loss. Although lack of sufficient providers is only one barrier to accessing oral healthcare, much of the country suffers from shortages. According to the Health Resources and Services Administration, as of December 2012, there were 4,585 Dental Health Professional Shortage Areas (HPSAs), with 45 million people total living in them.[1]

## Mental Health Providers

Mental health providers is the ratio of the county population to the number of mental health providers including psychiatrists, psychologists, licensed clinical social workers, counselors, marriage and family therapists, mental health providers that treat alcohol and other drug abuse, and advanced practice nurses specializing in mental healthcare. In 2015, marriage and family therapists and mental health providers that treat alcohol and other drug abuse were added to this measure.

### *Reason for Ranking*

Thirty percent of the population lives in a county designated as a Mental Health Professional Shortage Area. As the mental health parity aspects of the Affordable Care Act create increased coverage for mental health services, many anticipate increased workforce shortages.


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### Preventable Hospital Stays

Preventable hospital stays is the hospital discharge rate for ambulatory care-sensitive conditions per 1,000 fee-for-service Medicare enrollees. Ambulatory care-sensitive conditions include: convulsions, chronic obstructive pulmonary disease, bacterial pneumonia, asthma, congestive heart failure, hypertension, angina, cellulitis, diabetes, gastroenteritis, kidney / urinary infection, and dehydration. This measure is age-adjusted.

*Reason for Ranking*

Hospitalization for diagnoses treatable in outpatient services suggests that the quality of care provided in the outpatient setting was less than ideal. The measure may also represent a tendency to overuse hospitals as a main source of care.

### Diabetes Monitoring

Diabetes monitoring is the percentage of diabetic fee-for-service Medicare patients ages 65-75 whose blood sugar control was monitored in the past year using a test of their glycated hemoglobin (HbA1c) levels.

*Reason for Ranking*

Regular HbA1c monitoring among diabetic patients is considered the standard of care. It helps assess the management of diabetes over the long term by providing an estimate of how well a patient has managed his or her diabetes over the past two to three months. When hyperglycemia is addressed and controlled, complications from diabetes can be delayed or prevented.

### Mammography Screening

Mammography screening is the percentage of female fee-for-service Medicare enrollees age 67-69 that had at least one mammogram over a two-year period.

*Reason for Ranking*

Evidence suggests that mammography screening reduces breast cancer mortality, especially among older women.[1] A physician's recommendation or referral—and satisfaction with physicians—are major factors facilitating breast cancer screening. The percent of women ages 40-69 receiving a mammogram is a widely endorsed quality of care measure.

### Unemployment

Unemployment is the percentage of the civilian labor force, age 16 and older, that is unemployed but seeking work.

*Reason for Ranking*

The unemployed population experiences worse health and higher mortality rates than the employed population.[1-4] Unemployment has been shown to lead to an increase in unhealthy behaviors related to alcohol and tobacco consumption, diet, exercise, and other health-related behaviors, which in turn can lead to increased risk for disease or mortality, especially suicide.[5] Because employer-sponsored health insurance is the most common source of health insurance coverage, unemployment can also limit access to healthcare.

### Children in Poverty

Children in poverty is the percentage of children under age 18 living in poverty. Poverty status is defined by family; either everyone in the family is in poverty or no one in the family is in poverty. The characteristics of the family used to determine the poverty threshold are: number of people, number of related children under 18, and whether or not the primary householder is over age 65. Family income is then compared to the poverty threshold; if that family's income is below that threshold, the family is in poverty. For more information, please see Poverty Definition and / or Poverty.

In the data table for this measure, we report child poverty rates for black, Hispanic and white children. The rates for race and ethnic groups come from the American Community Survey, which is the major source of data used by the Small Area Income and Poverty Estimates to construct the overall county estimates. However, estimates for race and ethnic groups are created using combined five year estimates from 2012-2016.


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*Reason for Ranking*

Poverty can result in an increased risk of mortality, morbidity, depression, and poor health behaviors. A 2011 study found that poverty and other social factors contribute a number of deaths comparable to leading causes of death in the US like heart attacks, strokes, and lung cancer.[1] While repercussions resulting from poverty are present at all ages, children in poverty may experience lasting effects on academic achievement, health, and income into adulthood. Low-income children have an increased risk of injuries from accidents and physical abuse and are susceptible to more frequent and severe chronic conditions and their complications such as asthma, obesity, and diabetes than children living in high income households.[2]

Beginning in early childhood, poverty takes a toll on mental health and brain development, particularly in the areas associated with skills essential for educational success such as cognitive flexibility, sustained focus, and planning. Low income children are more susceptible to mental health conditions like ADHD, behavior disorders, and anxiety which can limit learning opportunities and social competence leading to academic deficits that may persist into adulthood.[2,3] The children in poverty measure is highly correlated with overall poverty rates.

### Income Inequality

Income inequality is the ratio of household income at the 80th percentile to that at the 20th percentile, i.e., when the incomes of all households in a county are listed from highest to lowest, the 80th percentile is the level of income at which only 20% of households have higher incomes, and the 20th percentile is the level of income at which only 20% of households have lower incomes. A higher inequality ratio indicates greater division between the top and bottom ends of the income spectrum. Please note that the methods for calculating this measure changed in the 2015 Rankings.

*Reason for Ranking*

Income inequality within US communities can have broad health impacts, including increased risk of mortality, poor health, and increased cardiovascular disease risks. Inequalities in a community can accentuate differences in social class and status and serve as a social stressor. Communities with greater income inequality can experience a loss of social connectedness, as well as decreases in trust, social support, and a sense of community for all residents.

### Children in Single-Parent Households

Children in single-parent households is the percentage of children in family households where the household is headed by a single parent (male or female head of household with no spouse present). Please note that the methods for calculating this measure changed in the 2011 Rankings.

*Reason for Ranking*

Adults and children in single-parent households are at risk for adverse health outcomes, including mental illness (e.g. substance abuse, depression, suicide) and unhealthy behaviors (e.g. smoking, excessive alcohol use).[1-4] Self-reported health has been shown to be worse among lone parents (male and female) than for parents living as couples, even when controlling for socioeconomic characteristics. Mortality risk is also higher among lone parents.[4,5] Children in single-parent households are at greater risk of severe morbidity and all-cause mortality than their peers in two-parent households.[2,6]

### Violent Crime Rate

Violent crime is the number of violent crimes reported per 100,000 population. Violent crimes are defined as offenses that involve face-to-face confrontation between the victim and the perpetrator, including homicide, rape, robbery, and aggravated assault. Please note that the methods for calculating this measure changed in the 2012 Rankings.

*Reason for Ranking*

High levels of violent crime compromise physical safety and psychological well-being. High crime rates can also deter residents from pursuing healthy behaviors, such as exercising outdoors. Additionally, exposure to crime and violence has been shown to increase stress, which may exacerbate hypertension and other stress-related disorders and may contribute to obesity prevalence.[1] Exposure to chronic stress also contributes to the


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increased prevalence of certain illnesses, such as upper respiratory illness, and asthma in neighborhoods with high levels of violence.[2]

### Injury Deaths

Injury deaths is the number of deaths from intentional and unintentional injuries per 100,000 population. Deaths included are those with an underlying cause of injury (ICD-10 codes *U01-*U03, V01-Y36, Y85-Y87, Y89).

*Reason for Ranking*

Injuries are one of the leading causes of death; unintentional injuries were the 4th leading cause, and intentional injuries the 10th leading cause, of US mortality in 2014.[1] The leading causes of death in 2014 among unintentional injuries, respectively, are: poisoning, motor vehicle traffic, and falls. Among intentional injuries, the leading causes of death in 2014, respectively, are: suicide firearm, suicide suffocation, and homicide firearm. Unintentional injuries are a substantial contributor to premature death. Among the following age groups, unintentional injuries were the leading cause of death in 2014: 1-4, 5-9, 10-14, 15-24, 25-34, 35-44.[2] Injuries account for 17% of all emergency department visits, and falls account for over 1/3 of those visits.[3]

### Air Pollution-Particulate matter

Air pollution-particulate matter is the average daily density of fine particulate matter in micrograms per cubic meter (PM2.5) in a county. Fine particulate matter is defined as particles of air pollutants with an aerodynamic diameter less than 2.5 micrometers. These particles can be directly emitted from sources such as forest fires, or they can form when gases emitted from power plants, industries and automobiles react in the air.

*Reason for Ranking*

The relationship between elevated air pollution (especially fine particulate matter and ozone) and compromised health has been well documented.[1,2,3] Negative consequences of ambient air pollution include decreased lung function, chronic bronchitis, asthma, and other adverse pulmonary effects.[1] Long-term exposure to fine particulate matter increases premature death risk among people age 65 and older, even when exposure is at levels below the National Ambient Air Quality Standards.[3]

### Drinking Water Violations

Change in measure calculation in 2018: Drinking Water Violations is an indicator of the presence or absence of health-based drinking water violations in counties served by community water systems. Health-based violations include Maximum Contaminant Level, Maximum Residual Disinfectant Level and Treatment Technique violations. A "Yes" indicates that at least one community water system in the county received a violation during the specified time frame, while a "No" indicates that there were no health-based drinking water violations in any community water system in the county. Please note that the methods for calculating this measure changed in the 2016 Rankings.

*Reason for Ranking*

Recent studies estimate that contaminants in drinking water sicken 1.1 million people each year. Ensuring the safety of drinking water is important to prevent illness, birth defects, and death for those with compromised immune systems. A number of other health problems have been associated with contaminated water, including nausea, lung and skin irritation, cancer, kidney, liver, and nervous system damage.

### Severe Housing Problems

Severe housing problems is the percentage of households with at least one or more of the following housing problems:

- housing unit lacks complete kitchen facilities;
- housing unit lacks complete plumbing facilities;
- household is severely overcrowded; or


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- household is severely cost burdened.
- Severe overcrowding is defined as more than 1.5 persons per room. Severe cost burden is defined as monthly housing costs (including utilities) that exceed 50% of monthly income.

*Reason for Ranking*

Good health depends on having homes that are safe and free from physical hazards. When adequate housing protects individuals and families from harmful exposures and provides them with a sense of privacy, security, stability and control, it can make important contributions to health. In contrast, poor quality and inadequate housing contributes to health problems such as infectious and chronic diseases, injuries and poor childhood development.


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# Appendix E – Youth Behavioral Risk Survey Results

North Dakota High School Survey

Rate Increase ↑, rate decrease↓, or no statistical change = in rate from 2017-2019

| | ND 2015 | ND 2017 | ND 2019 | ND Trend ↑, ↓, = | Rural ND Town Average | Urban ND Town Average | National Average 2019 |
|---|---|---|---|---|---|---|---|
| **Injury and Violence** | | | | | | | |
| Percentage of students who rarely or never wore a seat belt (when riding in a car driven by someone else) | 8.5 | 8.1 | 5.9 | = | 8.8 | 5.4 | 6.5 |
| Percentage of students who rode in a vehicle with a driver who had been drinking alcohol (one or more times during the 30 prior to the survey) | 17.7 | 16.5 | 14.2 | = | 17.7 | 12.7 | 16.7 |
| Percentage of students who talked on a cell phone while driving (on at least 1 day during the 30 days before the survey, among students who drove a car or other vehicle) | NA | 56.2 | 59.6 | = | 60.7 | 60.7 | NA |
| Percentage of students who texted or e-mailed while driving a car or other vehicle (on at least 1 day during the 30 days before the survey, among students who had driven a car or other vehicle during the 30 days before the survey) | 57.6 | 52.6 | 53.0 | = | 56.5 | 51.8 | 39.0 |
| Percentage of students who never or rarely wore a helmet (during the 12 months before the survey, among students who rode a motorcycle) | NA | 20.6 | NA | NA | NA | NA | NA |
| Percentage of students who carried a weapon on school property (such as a gun, knife, or club on at least 1 day during the 30 days before the survey) | 5.2 | 5.9 | 4.9 | = | 6.2 | 4.2 | 2.8 |
| Percentage of students who were in a physical fight on school property (one or more times during the 12 months before the survey) | 5.4 | 7.2 | 7.1 | = | 7.4 | 6.4 | 8.0 |
| Percentage of students who experienced sexual violence (being forced by anyone to do sexual things [counting such things as kissing, touching, or being physically forced to have sexual intercourse] that they did not want to, one or more times during the 12 months before the survey) | NA | 8.7 | 9.2 | = | 7.1 | 8.0 | 10.8 |
| Percentage of students who experienced physical dating violence (one or more times during the 12 months before the survey, including being hit, slammed into something, or injured with an object or weapon on purpose by someone they were dating or going out with among students who dated or went out with someone during the 12 months before the survey) | 7.6 | NA | NA | NA | NA | NA | 8.2 |
| Percentage of students who have been the victim of teasing or name calling because someone thought they were gay, lesbian, or bisexual (during the 12 months before the survey) | NA | 11.4 | 11.6 | = | 12.6 | 11.4 | NA |
| Percentage of students who were bullied on school property (during the 12 months before the survey) | 24.0 | 24.3 | 19.9 | ↓ | 24.6 | 19.1 | 19.5 |
| Percentage of students who were electronically bullied (including being bullied through texting, Instagram, Facebook, or other social media ever during the 12 months before the survey) | 15.9 | 18.8 | 14.7 | ↓ | 16.0 | 15.3 | 15.7 |
| Percentage of students who felt sad or hopeless (almost every day for 2 or more weeks in a row so that they stopped doing some usual activities during the 12 months before the survey) | 27.2 | 28.9 | 30.5 | = | 31.8 | 33.1 | 36.7 |
| Percentage of students who seriously considered attempting suicide (during the 12 months before the survey) | 16.2 | 16.7 | 18.8 | = | 18.6 | 19.7 | 18.8 |
| | ND 2015 | ND 2017 | ND 2019 | ND Trend ↑, ↓, = | Rural ND Town Average | Urban ND Town Average | National Average 2019 |
| Percentage of students who made a plan about how they would attempt suicide (during the 12 months before the survey) | 13.5 | 14.5 | 15.3 | = | 16.3 | 16.0 | 15.7 |
| Percentage of students who attempted suicide (one or more times during the 12 months before the survey) | 9.4 | 13.5 | 13.0 | = | 12.5 | 11.7 | 8.9 |


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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Tobacco Use** | | | | | | | |
| Percentage of students who ever tried cigarette smoking (even one or two puffs) | 35.1 | 30.5 | 29.3 | = | 32.4 | 23.8 | 24.1 |
| Percentage of students who smoked a whole cigarette before age 13 years (even one or two puffs) | NA | 11.2 | NA | **NA** | NA | NA | NA |
| Percentage of students who currently smoked cigarettes (on at least one day during the 30 days before the survey) | 11.7 | 12.6 | 8.3 | ↓ | 10.9 | 7.3 | 6.0 |
| Percentage of students who currently frequently smoked cigarettes (on 20 or more days during the 30 days before the survey) | 4.3 | 3.8 | 2.1 | ↓ | 2.3 | 1.7 | 1.3 |
| Percentage of students who currently smoked cigarettes daily (on all 30 days during the 30 days before the survey) | 3.2 | 3.0 | 1.4 | ↓ | 1.6 | 1.2 | 1.1 |
| Percentage of students who usually obtained their own cigarettes by buying them in a store or gas station (during the 30 days before the survey among students who currently smoked cigarettes and who were aged <18 years) | NA | 7.5 | 13.2 | = | 9.4 | 10.1 | 8.1 |
| Percentage of students who tried to quit smoking cigarettes (among students who currently smoked cigarettes during the 12 months before the survey) | NA | 50.3 | 54.0 | = | 52.8 | 51.4 | NA |
| Percentage of students who currently use an electronic vapor product (e-cigarettes, vape e-cigars, e-pipes, vape pipes, vaping pens, e-hookahs, and hookah pens at least one day during the 30 days before the survey) | 22.3 | 20.6 | 33.1 | ↑ | 32.2 | 31.9 | 32.7 |
| Percentage of students who currently used smokeless tobacco (chewing tobacco, snuff, or dip on at least one day during the 30 days before the survey) | NA | 8.0 | 4.5 | ↓ | 5.7 | 3.8 | 3.8 |
| Percentage of students who currently smoked cigars (cigars, cigarillos, or little cigars on at least one day during the 30 days before the survey) | 9.2 | 8.2 | 5.2 | ↓ | 6.3 | 4.3 | 5.7 |
| Percentage of students who currently used cigarettes, cigars, or smokeless tobacco (on at least 1 day during the 30 days before the survey) | NA | 18.1 | 12.2 | NA | 15.1 | 10.9 | 10.5 |
| **Alcohol and Other Drug Use** | | | | | | | |
| Percentage of students who ever drank alcohol (at least one drink of alcohol on at least one day during their life) | 62.1 | 59.2 | 56.6 | = | 60.6 | 54.0 | NA |
| Percentage of students who drank alcohol before age 13 years (for the first time other than a few sips) | 12.4 | 14.5 | 12.9 | = | 16.4 | 13.2 | 15.0 |
| Percentage of students who currently drank alcohol (at least one drink of alcohol on at least one day during the 30 days before the survey) | 30.8 | 29.1 | 27.6 | = | 29.4 | 25.4 | 29.2 |
| Percentage of students who currently were binge drinking (four or more drinks of alcohol in a row for female students, five or more for male students within a couple of hours on at least one day during the 30 days before the survey) | NA | 16.4 | 15.6 | = | 17.2 | 14.0 | 13.7 |
| Percentage of students who usually obtained the alcohol they drank by someone giving it to them (among students who currently drank alcohol) | 41.3 | 37.7 | NA | **NA** | NA | NA | 40.5 |
| Percentage of students who tried marijuana before age 13 years (for the first time) | 5.3 | 5.6 | 5.0 | = | 5.5 | 5.1 | 5.6 |
| Percentage of students who currently used marijuana (one or more times during the 30 days before the survey) | 15.2 | 15.5 | 12.5 | = | 11.4 | 14.1 | 21.7 |
| | ND 2013 | ND 2017 | ND 2019 | ND Trend ↑, ↓, = | Rural ND Town Average | Urban ND Town Average | National Average 2019 |
| Percentage of students who ever took prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it (counting drugs such as codeine, Vicodin, OxyContin, Hydrocodone, and Percocet, one or more times during their life) | NA | 14.4 | 14.5 | = | 12.8 | 13.3 | 14.3 |
| Percentage of students who were offered, sold, or given an illegal drug on school property (during the 12 months before the survey) | 18.2 | 12.1 | NA | NA | NA | NA | 21.8 |

*Sources:* https://www.cdc.gov/healthyyouth/data/yrbs/results.htm; https://www.nd.gov/dpi/districtsschools/safety-health/youth-risk-behavior-survey


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| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Percentage of students who attended school under the influence of alcohol or other drugs (on at least one day during the 30 days before the survey) | NA | NA | NA | NA | NA | NA | NA |
| **Sexual Behaviors** | | | | | | | |
| Percentage of students who ever had sexual intercourse | 38.9 | 36.6 | 38.3 | = | 35.4 | 36.1 | 38.4 |
| Percentage of students who had sexual intercourse before age 13 years (for the first time) | 2.6 | 2.8 | NA | NA | NA | NA | 3.0 |
| **Weight Management and Dietary Behaviors** | | | | | | | |
| Percentage of students who were overweight (>= 85th percentile but <95$^{th}$ percentile for body mass index, based on sex and age-specific reference data from the 2000 CDC growth chart) | 14.7 | 16.1 | 16.5 | = | 16.6 | 15.6 | 16.1 |
| Percentage of students who had obesity (>= 95th percentile for body mass index, based on sex- and age-specific reference data from the 2000 CDC growth chart) | 13.9 | 14.9 | 14.0 | = | 17.4 | 14.0 | 15.5 |
| Percentage of students who described themselves as slightly or very overweight | 32.2 | 31.4 | 32.6 | = | 35.7 | 33.0 | 32.4 |
| Percentage of students who were trying to lose weight | NA | 44.5 | 44.7 | = | 46.8 | 45.5 | NA |
| Percentage of students who did not eat fruit or drink 100% fruit juices (during the seven days before the survey) | 3.9 | 4.9 | 6.1 | = | 5.8 | 5.3 | 6.3 |
| Percentage of students who ate fruit or drank 100% fruit juices one or more times per day (during the seven days before the survey) | NA | 61.2 | 54.1 | ↓ | 54.1 | 57.2 | NA |
| Percentage of students who did not eat vegetables (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the seven days before the survey) | 4.7 | 5.1 | 6.6 | = | 5.3 | 6.6 | 7.9 |
| Percentage of students who ate vegetables one or more times per day (green salad, potatoes [excluding French fries, fried potatoes, or potato chips], carrots, or other vegetables, during the seven days before the survey) | NA | 60.9 | 57.1 | ↓ | 58.2 | 59.1 | NA |
| Percentage of students who did not drink a can, bottle, or glass of soda or pop (such as Coke, Pepsi, or Sprite, not including diet soda or diet pop, during the seven days before the survey) | NA | 28.8 | 28.1 | = | 26.4 | 30.5 | NA |
| Percentage of students who drank a can, bottle, or glass of soda or pop one or more times per day (not including diet soda or diet pop, during the seven days before the survey) | 18.7 | 16.3 | 15.9 | = | 17.4 | 15.1 | 15.1 |
| Percentage of students who did not drink milk (during the seven days before the survey) | 13.9 | 14.9 | 20.5 | ↑ | 14.8 | 20.3 | 30.6 |
| Percentage of students who drank two or more glasses per day of milk (during the seven days before the survey) | NA | 33.9 | NA | NA | NA | NA | NA |
| Percentage of students who did not eat breakfast (during the 7 days before the survey) | 11.9 | 13.5 | 14.4 | = | 13.3 | 14.1 | 16.7 |
| Percentage of students who most of the time or always went hungry because there was not enough food in their home (during the 30 days before the survey) | NA | 2.7 | 2.8 | = | 2.1 | 2.9 | NA |
| **Physical Activity** | | | | | | | |
| Percentage of students who were physically active at least 60 minutes per day on 5 or more days (doing any kind of physical activity that increased their heart rate and made them breathe hard some of the time during the 7 days before the survey) | NA | 51.5 | 49.0 | = | 55.0 | 22.6 | 55.9 |
| | ND 2015 | ND 2017 | ND 2019 | ND Trend ↑, ↓, = | Rural ND Town Average | Urban ND Town Average | National Average 2019 |
| Percentage of students who watched television 3 or more hours per day (on an average school day) | 18.9 | 18.8 | 18.8 | = | 18.3 | 18.2 | 19.8 |
| Percentage of students who played video or computer games or used a computer 3 or more hours per day (counting time spent on things such as Xbox, PlayStation, an iPad or other tablet, a smartphone, texting, YouTube, Instagram, Facebook, or other social media, for something that was not school work on an average school day) | 38.6 | 43.9 | 45.3 | = | 48.3 | 45.9 | 46.1 |
| **Other** | | | | | | | |
| Percentage of students who had eight or more hours of sleep (on an average school night) | NA | 31.8 | 29.5 | = | 31.8 | 33.1 | NA |
| Percentage of students who brushed their teeth on seven days (during the 7 days before the survey) | NA | 69.1 | 66.8 | = | 63.0 | 68.2 | NA |
| Percentage of students who most of the time or always wear sunscreen (with an SPF of 15 or higher when they are outside for more than one hour on a sunny day) | NA | 12.8 | NA | NA | NA | NA | NA |


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# Appendix F – Prioritization of Community's Health Needs

**Community Health Needs Assessment**
**Jamestown, North Dakota**
**Ranking of Concerns**

The top concerns for each of the five topic areas, based on the community survey and key informant interview results, were presented in a prerecorded presentation and in an online survey. The numbers below indicate the total number of votes by the key informants who participated in the survey which took place in lieu of a group meeting. The "Priorities" column lists the number of votes on the concerns indicating which areas are felt to be priorities. Each person was asked to choose their top four concerns. The "Most Important" column lists the top concerns after a second survey. After the first round of voting, the top five priorities were selected based on the highest number of votes. Each person was then asked to vote on the item they felt was the most important priority of the top four highest ranked priorities.

| | Priorities | Most Important |
|---|---|---|
| **COMMUNITY/ENVIRONMENTAL HEALTH CONCERNS** | | |
| Attracting & retaining young families | 5 | 5 |
| Not enough jobs with livable wages | 3 | 1 |
| Not having enough public transportation/cost of transportation | | |
| Having enough child daycare services | 2 | |
| | | |
| **AVAILABILITY/DELIVERY OF HEALTH SERVICES CONCERNS** | | |
| Availability of specialists | | |
| Availability of mental health services | 4 | 1 |
| Availability of substance use disorder treatment services | 2 | |
| Cost of healthcare services | | |
| Cost of healthcare insurance | | |
| | | |
| **YOUTH POPULATION HEALTH CONCERNS** | | |
| Depression/anxiety | 3 | 3 |
| Drug use and abuse (including prescription drugs) | 2 | |
| Alcohol use and abuse | 1 | |
| Smoking and tobacco use, exposure to second-hand smoke, juuling/vaping | | |
| Not enough activities for children | 1 | |
| | | |
| **ADULT POPULATION HEALTH CONCERNS** | | |
| Drug use and abuse (including prescription drugs) | 1 | |
| Alcohol use and abuse | 1 | |
| Depression/anxiety | 1 | |
| Obesity/overweight | 1 | |
| Not getting enough exercise/physical activity | 1 | |
| | | |
| **SENIOR POPULATION HEALTH CONCERNS** | | |
| Cost of long-term/nursing home care | | |
| Availability of resources to help elderly stay in their homes | | |
| Depression/anxiety | | |
| Ability to meet needs of older population | | |
| | | |


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